CONFERENCE ON DISARMAMENT

CD/1387
29 February 1996

Original: ENGLISH

AUSTRALIA

COMPREHENSIVE NUCLEAR TEST BAN TREATY

EXPLANATORY NOTES

ACCOMPANYING MODEL TREATY TEXT

(as contained in CD/1386)

GE.96-60769

TABLE OF CONTENTS

TREATY

Article		Page
	Preamble	4
I.	Scope	7
II.	National Implementation Measures	10
III.	The Organization	
	A. General Provisions	12
	B. The Conference of States Parties	14
	C. The Executive Council	16
	D. The Technical Secretariat	20
IV.	Privileges and Immunities	26
V.	Verification	
	General Provisions	27
	Technical Secretariat	29
	International Monitoring System	31
	Consultation and Clarification	36
	On-Site Inspections	38
	Associated Measures and the International Exchange of Other Relevant Information	51
VI.	Measures to Redress a Situation and to Ensure Compliance, including Sanctions	53
VII.	Settlement of Disputes	55
VIII.	Review of the Treaty	56
IX.	Amendments	58
X.	Duration and Withdrawal	59

XI. Status of the Protocol 60

XII. Signature 61

XIII. Ratification 62

XIV. Accession 63

XV. Entry into Force 64

XVI. Reservations 71

XVII. Depositary 72

XVIII. Authentic Texts 73

Other

Peaceful use of Nuclear Energy 74

Peaceful Nuclear Explosion 75

Security Assurances for States Parties 76

Relation to Other International Agreements 77

PROTOCOL

I. The International Monitoring System

General Provisions 78

Part 1: Seismological Monitoring 78

Part 2: Radionuclide Monitoring 79

Part 3: Hydroacoustic Monitoring 81

Part 4: Infrasound Monitoring 81

Part 5: Processing and Analysis of, Reporting on, and Access to International Monitoring System Data 82

Part 6: Authentication of International Monitoring System Data and Data Security 83

II. On-Site Inspections 84

Part 1: General Rules and Procedures 84

Part 2: Standing Arrangements 85

Part 3: Request for and Notification of an On-Site Inspection 86

Part 4: Pre-Inspection Activities 87

Part 5: Conduct of Inspections 88

III. Associated Measures 96

Previous parts of the Protocol 99

EXPLANATORY NOTES

PREAMBLE

**** Please note that para numbers correspond to those in CD/1364 (pages 42-43), not the Australian draft text ****

Our basic approach has been to delete language which has attracted only very limited support. The purpose of this approach has been to eliminate the most controversial elements of the text and to streamline it to the extent possible, bearing in mind that many delegations, in preliminary discussion of the preamble, expressed a desire for a streamlined, well-focused text.

PARA 2/PARA 4

We have removed the brackets around para 2. The text of this para (which is drawn from language in the NPTREC principles and objectives document) was proposed by one delegation and was intended to replace para 4. Para 2 covers, in a succinct manner, the essential point of para 4 - namely the point about the ultimate goal of eliminating nuclear weapons - and is in our view sufficient for the purposes of this Treaty. Accordingly, we have deleted para 4, the breadth of which is considered by many delegations to be inappropriate in the context of a treaty about banning nuclear testing.

PARA 3

We have deleted the brackets around this para which has attracted broad support.

PARA 5

We have replaced the bracketed word ''deep'', in line 2, with the word ''further''. The word ''deep'' was perceived by some delegations to be too subjective for a preamble. Moreover, it has been pointed out that some of the agreements and measures in question have not yet been ratified or implemented, and that it is therefore premature to try to qualify the reductions involved. Suggestions for alternatives have included ''substantial'' and ''further''. ''Further'' seems to us to be a more neutral and therefore more appropriate word - in the context of a preamble - than ''deep''.

PARA 7

We have deleted this para. It was proposed by one delegation and has attracted no support. It calls for international support for proposals regarding non-first use and security assurances. Many consider it to be inappropriate in the CTBT Preamble because its subject matter is too far removed from the subject of this Treaty.

PARA 8

We have deleted the phrase "within the framework of an effective nuclear disarmament process" in lines 3-4. This para is lifted directly from the UNGA CTBT resolutions of the past three years, each of which was adopted by consensus. The deleted phrase was not included in these resolutions. We see no grounds for seeking to alter language which has been agreed to by consensus at the past three UNGAs.

PARA 9

We have deleted the brackets around the last phrase in this para: "which are recalled in the Preamble to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons". Given that this entire para is lifted directly from the CTBT consensus resolutions of the last three years, we see no justification for amending it here. Although not all countries are party to the NPT, the reference to the NPT is sufficiently indirect to have enabled all non-States Parties to the NPT, in the context of UNGA resolutions, to accept and in some cases even cosponsor this language.

PARA 10

We have deleted this para. It has been opposed by several delegations. While supportive of its contents, we do not believe the para is essential in the context of this Treaty.

PARA 12

We have deleted this para. It has been opposed by some delegations. While desirable, we do not consider a para on the environment essential in the context of this Treaty.

PARA 13

We have deleted this para, which would more appropriately be placed in the verification section of the Treaty. Its level of technicality is clearly out of place in a preamble.

PARA 14

We have deleted the brackets around this para, deleted the brackets around the word "explosions" in line 2, and deleted the last phrase "as well as the discontinuance of all preparations immediately leading thereto".

While there are differing views about the need for including this para (some delegations find it useful to state the goal of the Treaty's prohibitions in the Preamble while others believe the Treaty's prohibitions should be dealt with only in the body of the Treaty) the most problematic element is the reference to "preparations". The notion of including preparations explicitly within the scope of the Treaty is widely opposed. We have therefore opted to retain the para but delete the reference to preparations.

We have deleted the brackets around the word "explosions", to align it with our draft article on Scope.

NEW PARAS

Early in the 1996 CD Session, several new paragraphs were proposed by one delegation for inclusion in the Preamble. The purpose of these new proposals was, in part, to reflect the view that the CTBT should be seen as a valuable step on the path towards nuclear disarmament. While we do not think that all of the proposed new paragraphs, in their current form, are capable of attracting consensus support, we have included one new paragraph in our draft Preamble (paragraph 7), which seeks to respond to the above-stated view.

EXPLANATORY NOTES

SCOPE

Note that this draft Article was tabled by Australia in the Conference on Disarmament, as Working Paper 222, in March 1995.

Structure of the Article

Unlike the Partial (or Limited) Test Ban Treaty (PTBT) scope Article (on which the Australian draft article draws) the notion of "carrying out" is separated from the requirement to "prohibit and prevent". This structure has been adopted in order to make clear that the ban on "carrying out" is not qualified in any way, while the requirement to "prohibit and prevent" is restricted to places under national jurisdiction or control. The approach whereby the ban on carrying out is separated from the requirement to prohibit and prevent has received widespread support, primarily for the following reason:

. As has been pointed out in NTB Working Group 2 (Legal and Institutional), it seems that the PTBT negotiators assumed that it was in effect impossible for a state to carry out a test in an area beyond its jurisdiction or control, and therefore restricted both the "carrying out" reference, and the requirement to "prohibit and "prevent", to places under jurisdiction or control. But there is now some concern that the carrying out of a test in an area beyond the jurisdiction or control of any State - such as on the high seas - is a possibility, and that there is therefore a potential loophole if the ban on carrying out a test is restricted to areas under jurisdiction or control. The most comprehensive approach, which avoids any loopholes, is to place no qualification on the ban on "carrying out".

One or two delegations have proposed that the requirement to prohibit and prevent testing apply in areas beyond as well as within territorial jurisdiction and control. (Another delegation has proposed that the requirement to prohibit and prevent apply only to areas beyond jurisdiction or control.) It is difficult to see, however, how it would be possible for a State to prohibit and prevent an activity in an area beyond its jurisdiction or control. Hence this draft article takes the logical approach of limiting the requirement to prohibit and prevent to areas under jurisdiction or control, subject of course to national implementation measures which would require prohibiting certain activities of nationals, including in areas beyond jurisdiction or control.

Specification of environments in which testing is banned.

Although the PTBT and bracketed paragraphs 1(a) and 1 (b) of the Rolling Text draft Article itemize the environments in which testing is banned, there is near consensus support for keeping this point as simple and comprehensive as possible by not attempting to itemize such environments.

"At any place", "in any environment", "anywhere"

The Rolling Text draft Article contains several bracketed phrases which qualify the prohibition on carrying out tests: in paragraph 1 the phrase "not to carry out" is followed by the bracketed phrases "at any place" and "in any environment"; in paragraph 2 the phrase "carrying out" is followed by "anywhere". We do not consider it necessary to make any reference to the environments or locations in which testing is banned, except in the one case where there is a restriction on the application of the ban - i.e. in paragraph 1 where the requirement to prohibit and prevent is limited to any place under jurisdiction or control (see above). In all other instances the ban is understood to apply in any environment, at any place whether under jurisdiction or control or not. In our view the easiest way to make this point clear, and to avoid any loopholes or possible confusion in the use of terms to locate environments and/or jurisdiction, is to place no qualification on the ban on carrying out nuclear explosions; it is an unqualified ban.

"Explosions"

A few delegations have proposed either that a definition of the word "explosion" be included, or that the word "explosion" be bracketed. We have not incorporated such proposals since, in our view, the Scope Article should reflect the traditional goal of a CTBT, namely to establish a truly comprehensive ban on nuclear explosions. Our draft article is designed to achieve this in a succinct and comprehensive manner.

"Assisting"

A wide range of countries oppose the inclusion of the term "assisting" (bracketed in para 2 of the Rolling Text draft Article), since this term is understood to be covered by the phrase "in any way participating in" . We have therefore not included "assisting" in our draft Article.

Preparations

A wide range of delegations oppose explicit inclusion of preparations in the Scope Article. ("preparing" appears in brackets in the Rolling Text draft Article.) It would be extremely difficult to define precisely what constitutes preparations, and complicated and costly to verify such a ban. It is, moreover, unnecessary to ban preparations. If a country had undertaken advanced, direct preparations for a nuclear test, exhibiting an intention to violate the Treaty, this would be sufficient grounds for other States Parties to have a concern about compliance and activate consultative procedures.

Cross-referencing between paras 1 and 2

A small number of delegations have argued for the phrase "nuclear weapon test explosion or any other nuclear explosion" in para 2 to be cross-referenced to para 1 (by the phrase "as referred to in paragraph 1 of this Article", or "which would take place in any of the environments described in paragraph 1 of this Article").

Given that there is no need, in the view of the vast majority of delegations, to specify environments in the case of the CTBT (see points under "Specification of environments in which testing is banned"), there is no consequent need for cross-referencing between paragraphs 1 and 2.

EXPLANATORY NOTES

NATIONAL IMPLEMENTATION MEASURES

We have deleted all bracketed text in this article, namely: the words ''and prevent'' in paras 1(a), 1(b), and 1(c); the words ''and legal'' in para 1(c); and the phrase ''including enacting penal legislation or other punitive measures with respect to such activity'' in paras 1(a) and 1(c).

''and prevent''

Our assessment is that the inclusion of these words in paras 1(a), 1 (b) and 1(c) is not essential for the purposes of the article. Moreover, they cause considerable problems for several delegations. The obligation ''to prevent'' clearly adds something to the requirement ''to prohibit'', by suggesting a positive obligation on States Parties to make provision beforehand against the occurrence of prohibited activities. Some argue that this is too far-reaching since, in effect, it requires the enactment of legislation to prohibit preparations for a nuclear test explosion. This raises the problems which have led to almost universal opposition to the inclusion of preparations in the Scope article (how do you define preparations? how could such a prohibition be effectively verified? would the verification cost implications be excessive?). Moreover, the inclusion of the words "and prevent" implies an obligation of result - so that a State Party could be in breach of the Treaty if, in spite of legislation to the contrary, activities prohibited by the Treaty were to take place in its territory. The additional requirement imposed by "and prevent" would be particularly onerous in the para 1(c) context (nationals outside the territory).

A small number of delegations appear comfortable with the inclusion of the words ''and prevent'', essentially because they are consistent with the widely accepted phrase ''prohibit and prevent'' in the Scope article. We do not think there is an overriding requirement for identical language in the Scope and National Implementation Measures articles, since their purposes differ: the Scope article sets out in broad terms the basic obligations of the Treaty as they apply to the State, whereas the National Implementation Measures article deals with the national regulatory requirements of implementation, including with specific reference to natural and legal persons (as opposed to the State itself).

Since it would not undercut the Scope article, we judge it best to delete the references to ''and prevent'' in the National Implementation Measures article. It should be noted that if a State Party became aware of a natural or legal person conducting activities which were clearly connected to an imminent nuclear test, the State Party would have grounds to take action to prevent the violation of the Treaty occurring, irrespective of whether the words ''and prevent'' were included in the National Implementation Measures article, and indeed irrespective of whether preparations were included in the Scope article. That is, the *power* of States Parties to take action to prevent activities related to testing would not be impaired by the absence of a CTBT *obligation* to do so.

"and legal"

Only one country supports the retention of these words. Their inclusion has been widely opposed on the grounds that the limit of application of the prohibition in respect of legal persons is already achieved under para 1(a), and that no further assurance can be provided through the inclusion of a reference to legal persons in para 1(c).

Moreover, the inclusion of "legal persons" in para 1(c) could be an unnecessary source of dispute: the prohibition in the context of para 1(c) is based on a link of nationality, and such links between corporations (legal persons) and States are known to be frequently tenuous and contentious.

We have therefore deleted the reference to "legal persons" in para 1(c).

"...penal legislation or other punitive measures ..."

This proposal is seen by many delegations as being unduly prescriptive. There is broad agreement that it is sufficient that each State Party will be required under the Treaty to "take any necessary measures", in accordance with its constitutional processes, to ensure that the prohibitions of the Treaty are enforced. Specification of the nature of such measures is neither necessary nor desirable, since the means of enforcing prohibitions will differ from country to country.

While sympathetic to and supportive of the underlying goal of this proposal - namely the establishment of a basic minimum standard for enforcement of prohibitions among States Parties - we doubt that this goal would be achieved through the text proposed. The term "penal legislation" or "penal measures" is interpreted in different ways from country to country: in some countries it is interpreted broadly to mean any measure involving some form of punishment, in others it carries with it the notion of strict or severe punishment. Hence a basic minimum standard will not be established merely by use of either or both of these terms; "punitive measures" could entail anything from a fifty dollar fine to life imprisonment.

The most effective means of seeking to establish uniformity of national implementation of the Treaty is probably not through the Treaty provisions themselves, but rather through parallel processes such as Preparatory Commission work, regional workshops or other forms of coordination or assistance.

We have therefore deleted the reference to enacting penal legislation or other punitive measures, in paras 1(a) and 1(c).

EXPLANATORY NOTES

THE ORGANIZATION

**** NB. Paragraph numbers refer to the Australian draft treaty text, unless otherwise indicated ****

Throughout the Organization Article we have, as a rule, removed the brackets around text which has attracted broad support, and amended or deleted text which, to date, has attracted the support of only a small minority of delegations or, in some cases, only one delegation. Our proposed text on key provisions in the Organization Article is explained below.

A. GENERAL PROVISIONS

PARA 6

Note that in this para (which is lifted from the CWC and which is unbracketed in the Rolling Text), we have added the word "effective" in the second line, to achieve a more complete description of the manner in the Organization should conduct its verification activities.

PARA 8

On the question of the relationship between the CTBT Organization and other international organizations, we have used the language contained in para 8, page 48 of CD/1364. This language, in our assessment, corresponds to the "middle ground" approach, namely an approach which is neither maximalist nor minimalist. It provides for cooperative arrangements to be made by an independent CTBTO with other international organizations, without precluding (or prescribing) any particular type of arrangement. This flexibility should help ensure that the most cost-effective, appropriate arrangements are able to be made with other international organizations. (It also leaves the detail of such arrangements for the Preparatory Commission, and subsequently the CTBTO itself, to determine.)

Note that we have added emphasis to the reference to the International Atomic Energy (by saying "in particular the IAEA" rather than "such as the IAEA"), in recognition of the widespread acceptance of the likelihood that much of the cost-effective cooperation being promoted in this paragraph will be pursued with the IAEA.

Note also that we have added the word "relevant" before the word "expertise" in line 1, to achieve a more precise description of the type of expertise which the Organization should seek to utilize.

PARAS 9-12

On funding, we have included the proposed provision for a "contribution credit" option. We have, however, amended the Rolling Text's version (paras 10-11, page 48, and para 53, page 59, CD/1364) drawing on the changes proposed in South Africa's Working Paper of 26 January 1996, entitiled "Funding Elements of the CTBT".

South Africa's Working Paper outlines some of the difficulties which could arise under the contribution credit system as set out in the Rolling Text. The main problem is the risk of the Organization facing cash-flow problems, or even financial crisis, in the event that States Parties fulfilled all or most of their assessment obligations by a contribution credit. South Africa's Working Paper proposes resolving this problem by:

- limiting contribution credits to contributions for the establishment and upgrading of the IMS infrastructure;

- placing a percentage cap on the proportion of a State Party's annual assessment obligation which may be available for contribution credit;

- allowing those States Parties which choose to use the contribution credit option to be credited for the full amount of their contribution over a period of more than one year (as has already been proposed).

South Africa cites several advantages in such a system, including the following:

- it would allow States Parties, after necessary consultation with and agreement from the Organization, to assist in the establishment of the IMS without having to wait for the inevitable delay in payment for services provided;

- it should speed-up the establishment and upgrading of the IMS;

- it should be an easier process for the Organization to manage because the Organization would be able to establish universal credit values for the component parts of the IMS at an early stage, as opposed to providing credit values for the full range of purchases/activities of the Organization (as is proposed under the original contribution credit suggestion), which would be a highly complicated and potentially controversial procedure.

The South African proposal appears to us to respond to many of the concerns raised by various delegations about the contribution credit system, and we have therefore adopted it in our draft text. Note that:

- We have reordered the various provisions of paras 10-12 and para 52, as their current arrangement in the Rolling text is somewhat disjointed.

- We have not specified the percentage cap for the proportion of a States Party's annual assessment obligation which may be available for contribution credit (see para 12). Further work on cost estimates will be needed in order to establish a suitable percentage cap, if indeed there will be a cash-flow problem without such a cap.

- Para 52 in the Technical Secretariat section has been amended to bring it into line with the General Provisions section.

B. THE CONFERENCE OF THE STATES PARTIES

PARA 19

With respect to the provision for Review Conferences, we have opted for cross-referencing to a separate article on Review of the Treaty (Article VIII), rather than incorporating the Review provision within the Organization article. See explanatory notes on Article VIII for further background.

PARA 28 (c)

See notes under paras 29-32 below.

PARA 28 (f)

This para was not included in the Rolling Text, but is lifted from the CWC (Article VIII, para 20(f)). We judge it important to include this para for two reasons:

- It makes explicit the Conference's power to establish subsidiary organs (which is consistent with para 4 of the draft Article on Organization, which provides for the Organization to establish subsidiary bodies "according to the provisions of this Treaty").

- It is consistent with para 4 of the draft on Settlement of Disputes, which provides for the Conference to establish organs with tasks related to the settlement of disputes.

PARA 28 (g)

In the absence of widespread support for the proposed provision for the establishment of a Scientific Advisory Board, we have adopted the more general approach whereby it is stipulated that the Conference shall consider and review scientific and technological developments that could affect the operation of the Treaty. Note that in addition, in the Technical Secretariat section, we have included a provision enabling the Director-General to establish temporary working groups of scientific experts to provide recommendations on specific issues. These provisions will ensure that questions and concerns relating to scientific and technological issues will be able to be fully addressed at expert level, without having to establish a permanent, and probably costly, additional body.

PARA 28 (i)

In the context of the list of the types of documents (prepared by the Preparatory Commission) which the Conference will consider and approve at its first session, we have included a reference to the report on the operational status of the Treaty's verification regime. While we do not consider it necessary, in principle, to single out for explicit reference any of the documents which will be considered and approved by the Conference at its first session, the report on the operational status of the verification regime is likely to be of such interest to all States Parties that an explicit reference seems justifiable.

PARA 28 (j)

We have imported this text from the Executive Council section (second sentence of paragraph 40(k), page 56, CD/1364). There has been debate about whether the Executive Council or Conference of the States Parties should have the function of approving new or updated Operational Manuals, subsequent to those approved by the Conference at its first session (see para 28(i) above). We accept the argument that has been put forward by several delegations that all States Parties should have the opportunity to be involved in the approval process for new and updated Operational Manuals. We have therefore listed this as a function of the Conference of the States Parties, rather than the Executive Council.

C. THE EXECUTIVE COUNCIL

PARAS 29-32 (Composition of the Executive Council)

We have sought a formula which:

- establishes a relatively small Executive Council (ExCo), in the interests of efficiency;
- promotes (but does not prescribe) continuous membership of "key" players;
- avoids reference to criteria which could be criticised as being discriminatory;
- employs a regional group system most readily applicable in the CTBT context (i.e. the five UN groupings); and
- ensures that no State Party can be permanently excluded from membership of the ExCo.

Our proposed provision draws on the CWC model for ExCo composition. Under our proposal the ExCo would comprise 41 seats, apportioned among the five UN regional groups. Our draft provision also stipulates that a certain number of seats from each regional group must be designated by rotation. Proposed distribution of seats is follows:

	No. of seats	% of seats	No of rotating seats
Africa	9	22	2
Asia	9.5	23.1	2.5
E. Europe	5	12.2	1
L. Am. and. Carib.	7.5	18.3	1.5
WEOG	10	24.4	2
	41	100	

The allocation of seats would be left essentially for States Parties to determine within their respective regional groups, with two sets of qualifications:

(i) a specified number of seats within each regional group would have to be designated on the basis of alphabetical rotation; and

(ii) in allocating seats within regional groups, States Parties would be required to pay special regard to equitable geographical distribution and to political and security interests, and to accord particular priority to:

- those States Parties responsible for the highest number of IMS stations;
- those States Parties which have, have ever had, or have under construction nuclear power or nuclear research reactors, as determined by data published by the International Atomic Energy Agency; and

- those States Parties which ratify the Treaty prior to its entry into force.

The criteria to be accorded particular priority in the designation of ExCo seats, as listed above, were in our assessment more objective and of the greater relevance in the CTBT context than were other criteria:

- The number of IMS stations for which a State Party is responsible is of direct relevance to the CTBT. While the initial question of the number of IMS sensors on each State's territory depends largely upon the size of the territory involved, those States with a relatively large number of IMS sensors will *ipso facto* have some claim to have their voice heard in the CTBTO and a particular incentive for active involvement.

- Nuclear capability is also of direct relevance to the CTBT. The most comprehensive and non-discriminatory means of defining "nuclear capability" is, in our assessment, by reference to all States which have, have ever had, or have under construction, nuclear power or nuclear research reactors.

- Prompt ratification of the Treaty - i.e. prior to its entry into force - would in general reflect strong commitment to it, and thus grounds for being given priority in respect of ExCo membership. Moreover, inclusion of this criteria could serve as an incentive for early and universal ratification.

Other criteria which we considered, but assessed to be lacking in objectivity and/or relevance, or likely to result in disproportionate disadvantaging of one or more regional groups, were the following: possession of nuclear weapons; "total years of reactor experience" as a definition of nuclear capability; and assessed financial contribution to CTBTO.

The main advantages of our proposed provision are as follows:

- It does not prescribe criteria, individually or in combination, as conditions for ExCo membership. Rather, it requires that States Parties "accord particular priority to" the listed criteria. Our formula thus allows some flexibility for States Parties, within their respective regional groups, to determine for themselves how seats will be allocated, including with respect to the question of continuous seats;

- The listed criteria are relatively objective;

- The listed criteria promote continuous membership of "key" states, but in a non-discriminatory way;

- Through the rotation provision, it ensures that no State can be permanently excluded from serving on the ExCo;

- The regional group system employed (the five UN groupings) is in our assessment more readily applicable in the CTBT context than are some other groupings, such as the IAEA Board of Governors' eight regional groups. Using the latter grouping, which was established in the IAEA Statute, could cause undue complications in the CTBT context.

- That said, it should be noted that the principles upon which our proposed provision is based (no prescribed criteria, some discretion to regional groups in the designation of seats, rotation of a specified number of seats within each region) could easily be applied using other regional group systems.

**** N.B. Background information relevant to the criteria proposed above can be found at the end of the Explanatory Notes on Organization. ****

Note that we have used the term "designate" in preference to the term "elect", when describing the function of States Parties with respect to the determination of Executive Council composition. The term "designate" is more consistent with the notion of appointing members on the basis of certain criteria and guidelines (as proposed our draft provision on Executive Council composition). The term "election", on the other hand, is more consistent with the notion of making choices without restriction, and is therefore less appropriate in the context of this Article. We would note, however, that the employment of either term is unlikely to make much difference in practice.

To ensure that the designated members are given formal recognition, and to avoid possible ambiguity through repetition of the term "designate", we have used the term "appoint" when describing the function of the Conference as a whole in respect of Executive Council composition (see paras 28(c), 31 and 32).

PARAS 37-38

We have included the provision establishing a two-thirds majority of members of the Executive Council as a quorum, and the provision requiring support by a two-thirds majority of members present and voting for the adoption of decisions of substance. The "present and voting" requirement is consistent with the provision for decision-making in the Conference of the States Parties section.

Note that the CWC Executive Council provision makes no mention of quorums, but requires support by a two-thirds majority of *all* members of the Executive Council for decisions of substance, thereby implicity establishing two-thirds of all members as a quorum. A potential problem we see in this approach is that if, for example, only two-thirds of the members of the Executive Council were present at the time of decision-making, decisions of substance could be adopted only if *all* members present and voting so agreed. This, we believe, could be too stringent a requirement.

PARA 42(c)

We have aligned the language of this paragraph with our draft text on on-site inspection, as contained in Article V (Verification) and the Protocol, with an appropriate cross-reference. For further background, see explanatory notes under Verification.

PARA 43

We have aligned this paragraph with the related Article on "Measures to Redress a Situation and to Ensure Compliance, including Sanctions" (Article VI). We have used cross-references in preference to duplication of the detail of the Executive Council's role in respect of compliance concerns (which is clearly set out in the Compliance Article). Note that para 44 of CD/1364, page 57, in substance replicates the sub-paragraph 43(d). We have therefore deleted para 44.

We have replaced the phrase "including, *inter alia*, abuse of the rights established by this Treaty" with the more comprehensive phrase "with the provisions of this Treaty and its Protocol".

D. THE TECHNICAL SECRETARIAT

PARA 45

We have aligned the sub-paragraphs of this paragraph with our proposed provisions in Article V (Verification) and the Protocol. See explanatory notes under Verification for further background.

PARA 48

We judged it best to draft this provision, concerning the Technical Secretariat's responsibility to inform the Executive Council of problems that have arisen with regard to the discharge of its functions, in general terms only. We do not consider it necessary, or even desirable, to try to list examples of the type of concern that may arise (as does the Rolling Text's draft para on this issue -para 49, page 58, CD/1364).

PARA 49

Note that, in accordance with our draft text concerning the approval of Operational Manuals (see notes under para 28(i) above), we have included the reference to "the Conference", and deleted the reference to "the Executive Council" in this paragraph.

PARA 51

The Rolling Text contains two bracketed sentences in para 52 (page 59, CD/1364) relating to the recruitment of staff for the Technical Secretariat. We have attempted to draft a single sentence, combining elements of both the original sentences. We have retained an explicit reference to the principle of equitable geographic distribution, but, in the interests of pragmatism and compromise, have included it in the context of a "best endeavours" clause, rather than as a mandatory specification.

PARA 52

We have aligned this para with our proposed text on funding (see notes under paras 9-12 above).

EXECUTIVE COUNCIL COMPOSITION: BACKGROUND INFORMATION

List of States which have, have ever had, or have under construction, nuclear power or research reactors
(IAEA, Current status of power and research reactors, February 1995)

Algeria
Argentina
Australia
Austria
Bangladesh
Belarus
Belgium
Brazil
Bulgaria
Canada
Chile
China
Colombia
Cuba
Czech Republic
Denmark
Egypt
Finland
France
Georgia
Germany
Ghana
Greece
Hungary
India
Indonesia
Iran, Islamic Republic of
Iraq
Israel
Italy
Jamaica
Japan
Kazakhstan
Korea, Democratic People's Republic of
Korea, Republic of
Latvia
Libyan Arab Jamahiriya
Lithuania
Malaysia
Mexico
Morocco
Myanmar

Netherlands
Norway
Pakistan
Peru
Philippines
Poland
Portugal
Romania
Russian Federation
Slovak Republic
Slovenia
South Africa
Spain
Sweden
Switzerland
Syrian Arab Republic
Thailand
Turkey
Ukraine
United Kingdom
United States of America
Uruguay
Uzbekistan
Venezuela
Viet Nam
(Federal Republic of Yugoslavia)
Zaire

EXECUTIVE COUNCIL COMPOSITION: BACKGROUND INFORMATION

List of States Responsible* for IMS Station(s)

	Seismological stations (including auxiliary network)	Hydro-acoustic stations	Infrasound stations	Radionuclide stations	TOTAL
Argentina	3		1	2	6
Armenia	1				1
Australia	7	1	5	6	19
Belau			1		1
Bolivia	2		1		3
Botswana	1				1
Brazil	3		1	2	6
Cameroon				1	1
Canada	9	1	1	4	15
Cape Verde			1		1
Central African Rep	1		1		2
Chile	2	1	2	2	7
China	6		2	2	10
Colombia	1				1
Costa Rica	1				1
Cote D'Ivoire	1		1		2
Czech Rep	1				1
Denmark	1		1		2
Djibouti	1		1		2
Ecuador			1	1	2
Egypt	2				2
Ethiopia	1			1	2
Fiji	1			1	2
Finland	1				1
France	3	2	5	6	16
Gabon	1				1
Germany	2		2	1	5
Greece	1				1
Guatemala	1				1
Iceland	1			1	2
India	2		1	1	4
Indonesia	6				6

* Without prejudice to the question of sovereignty

	Seismological stations (including auxiliary network)	Hydro-acoustic stations	Infrasound stations	Radio-nuclide stations	TOTAL
Iran	3		1	1	5
Israel	2				2
Japan	6		1	1	8
Kazakhstan	4		1		5
Kenya	1		1		2
Kiribati				1	1
Kuwait				1	1
Kyrghystan	1				1
Libya				1	1
Madagascar	1		1		2
Malaysia				1	1
Mali	1				1
Mauritania				1	1
Mexico	3	1		1	5
Mongolia	1		1	1	3
Morocco	1				1
Namibia	1		1		2
Nepal	1				1
New Zealand	4		1	3	8
Niger	1			1	2
Norway	4		1	1	6
Oman	1				1
Pakistan	1		1		2
Panama				1	1
Papua New Guinea	2		1	1	4
Paraguay	1		1		2
Peru	2				2
Philippines	2			1	3
Portugal		1	1	1	3
Rep Korea	1				1
Romania	1				1
Russian Fed	19		4	7	30
Samoa	1				1
Saudi Arabia	2				2
Senegal	1				1
Solomon Is	1				1
Sth Africa	2		1	1	4
Spain	1				1

	Seismological stations (including auxiliary network)	Hydro-acoustic stations	Infrasound stations	Radio-nuclide stations	TOTAL
Sweden	1			1	2
Switzerland	1				1
Thailand	1			1	2
Tunisia	1		1		2
Turkey	1				1
Turkmenistan	1				1
Uganda	1				1
Ukraine	1				1
UK	1	2	4	3	10
USA	16	2	9	12	39
Venezuela	2				2
Zambia	1				1
Zimbabwe	1				1

EXPLANATORY NOTES

PRIVILEGES AND IMMUNITIES

Our draft article is identical to that contained in the Rolling Text (CD/1364), which contains no brackets.

EXPLANATORY NOTES

VERIFICATION

N.B. Paragraph numbers refer to the Australian draft treaty text. References to CD/1364 are included and clearly indicated.

We have based our Verification Article to the utmost extent on the language and concepts already agreed by the Conference in CD/1364 and subsequently. We have, as a rule, removed brackets around language which has attracted broad support, and amended or deleted text which, to date, has attracted the support of only a small minority of delegations, or, in some cases, only one delegation.

The structure of our Verification Article reflects that of the Rolling Text, with the addition of some new sub-headings for easier reference, as follows:

General Provisions	(paras 1 - 11)
Technical Secretariat	(paras 12 - 13)
International Monitoring System	(paras 14 - 26)
. Changes to the International Monitoring System	(paras 16 - 19)
. Temporary Arrangements	(para 20)
. Co-Operating National Facilities	(paras 21 - 22)
. Funding the International Monitoring System	(paras 23 - 27)
Consultation and Clarification	(paras 28-32)
On-site inspection (outlined below)	(Paras 33-67)
Associated Measures and the International Exchange of Other Relevant Information.	(paras 68 - 70)

GENERAL PROVISIONS

This section (paragraphs 1-11) is equivalent to the General Provisions section in CD/1364 (paras 1 - 16, pages 68-70).

PARA 1

We have deleted paragraph 1 (d) (page 68, CD/1364) which has not attracted broad support, and because we do not believe that it accurately captures the important concept of international exchange of "other relevant information". In our view, this element of the verification regime is more akin to the category of associated measures. Our package for its treatment is set out in the section entitled "Associated Measures and the International Exchange of Other Relevant Information" (paragraphs 69 - 70). We have selected - from the three available options in para 1 (e) (page 68, CD/1364) - "Associated Measures" as the appropriate heading for this expanded section .

There is, in our assessment, broad convergence within the Conference that the Treaty should not be overly prescriptive by defining the "operational" status of the International Monitoring System at the point of the Treaty's entry into force. At the same time, there is a general understanding that an "operational" IMS will require all monitoring technologies to be

functioning at some level, for the global communications infrastructure to be in place and functioning, and for the Technical Secretariat/International Data Centre to be supporting the system and producing reports. We have therefore deleted the bracketed word "fully" from line 9, paragraph 1, page 68 of CD/1364. We have also deleted the two bracketed sentences following, which were proposed by one delegation, and have attracted no support. Note that we have included for completeness a general reference to the role of the Technical Secretariat in supporting the verification regime.

PARA 2

We have based this paragraph on its equivalent in page 68 of CD/1364. For consistency, we have replicated the wording of Article I ("Scope") of our revised text. As would seem appropriate in this introductory section, we have included here the idea that a fundamental goal of the verification regime shall be to collect information which would allow States Parties to identify whether or not a State Party is in non-compliance with the basic Treaty obligations in Article I ("Scope") and to take measures to redress the situation, according to Article VI ("Measures to Redress a Situation and to Ensure Compliance, including Sanctions") .

PARA 4

We have drawn almost entirely from paragraph 5 (page 69, CD/1364), choosing the "Organization" option because a State Party's verification cooperation - especially with regard to on-site inspection - will be as much with the executive organs of the Organization (notably the Executive Council and Conference of States Parties) as it will be with the Technical Secretariat.

PARA 8

This paragraph is based on currently bracketed language (paragraph 13, page 70, CD/1364) which we have streamlined, made consistent with and cross-referenced to paragraphs 6 and 7. We have selected the "made available" option, in recognition of the fact that some of the information received by the Technical Secretariat may not necessarily be routinely distributed to them - see para 12 (e).

PARA 11

We have substantially reproduced the bracketed language of para 16 (page 70 of CD/1364). We do not think that it is appropriate in the CTBT context to include an undertaking to facilitate cooperation in the peaceful uses of nuclear energy (see Explanatory Notes for deletion of Rolling Text article on "Peaceful Use of Nuclear Energy"). At the same time, we do recognise the potential benefit for countries of the application of verification technologies for peaceful purposes (eg atmospheric sampling technologies, related meteorological skills), and have accordingly included that concept.

Other

In our Verification: General Provisions section, we have not incorporated paragraphs 4, 7 and 8 (pages 68 - 69, CD/1364), which have not attracted broad support. A new package providing for the exchange of "other relevant information" between States Parties is contained in the section "Associated Measures and the International Exchange of Other Relevant Information". We also think that it is unnecessary to spell out here the right of States Parties to make their own determinations on the relevance of any event to this Treaty - a right which is in no way affected by our approach. We have similarly not included paragraph 10 (page 69, CD/1364), which pertains to a proposal made by one delegation on on-site inspection, and which has no support.

TECHNICAL SECRETARIAT

PARAS 12-13

We have rationalised the contents of paragraphs 21, 22, 28, 29, 30, 31 and 32 of (CD/1364 pp 71 - 75) to set out the verification responsibilities of the Technical Secretariat, placed logically before the section on the International Monitoring System. In accordance with the trend of recent thinking, we have chosen in listing the verification functions of the Technical Secretariat not to seek to distinguish in a rigorous institutional sense between tasks which might - depending on decisions of Directors-General in the future - be the responsibility of the Secretariat in the broad, or the particular responsibility of the sub-entity of the International Data Centre.

Paragraph 12 (a) is based on paragraph 28 (page 73 of CD/1364). We have included the important point that the Technical Secretariat will confine its arrangements to receiving data "relevant to the verification of this Treaty". We have also added a reference to the Technical Secretariat's responsibility for maintaining a global communications infrastructure to support the international verification regime, which will be an essential component of the Technical Secretariat's functions.

Paragraph 12 (b) is based on paragraph 29 (pages 73 - 74, CD/1364). In accordance with the above, we have replaced the formulation of the IDC's functions as "integral", by an adaptation of previously footnoted wording so that the IDC is described as the "focal point" for data storage and "computationally-intensive" data processing (the latter formulation was suggested by technical experts).

In paragraph 12 (b) (i) we have substituted the term "initiate requests", to better describe the use of auxiliary seismic stations and T-phase hydroacoustic stations operating in "pull" mode.

In paragraph 12 (b) (iii), we have removed the brackets from paragraph 29 (c) CD/1364. We have added language to make it consistent with our approach to "other relevant information".

Paragraph 12 (c) combines the essential components of paragraph 21 chapeau 21 (b) and the first element of paragraph 22 (page 72 of CD/1364).

Paragraph 12 (d) describes the fundamentally important processing, analytic and reporting responsibilities of the Technical Secretariat with regard to verification regime data.

The existing language in paragraph 30 (a) (page 74, CD/1364) contains a complex range of ideas. We judge some maximalist preferences as incapable of attracting consensus. For example, suggestions to entrust the Technical Secretariat with sole responsibility for analysis of verification data, for event identification, and for alerting States Parties to non-compliance, appear to contradict other parts of the Treaty which make it clear that compliance judgments are the preserve of States Parties. At the same time, it would clearly be impractical for States Parties if the role of the Technical Secretariat were confined to distributing the overwhelming quantities of raw or semi-processed data .

Our paragraph 12 (d) is almost entirely new text, which attempts to draft a middle way through the preferences expressed by delegations. Key elements of our approach include:

. The declaration that the content of any reporting by the Technical Secretariat shall be without prejudice to final judgements on the nature of a detected event, or with regard to non-compliance, both of which shall remain the responsibility of States Parties in accordance with the Compliance article.

. A descriptive approach to the role of the Technical Secretariat, building on elements which command technical support, for example, that the IDC shall apply automated and interactive data processing and analysis procedures to IMS data.

. A descriptive definition of one specific reporting product from the Technical Secretariat which will present important verification data to States Parties - the regular bulletin. The language underlines that processing will be conducted according to agreed and objective technical criteria (such as already exist to locate and constrain the depth of seismic events); that data from different monitoring technologies will be co-processed to obtain synergistic benefits; that the IDC will attempt to associate detections from different facilities with the one origin event; and that the final reporting will seek to locate, assign an origin time to and characterize detected relevant events. Such bulletins will not however seek to characterize beyond technical limits, nor be conclusive.

Paragraph 12 (e) is a rationalised version of paragraph 30 (b) (page 74, CD/1364). We have selected the phrase "make available" because it is more comprehensive, and we use it consistently throughout this Article when referring to the Technical Secretariat's data exchange facilitation function. We have deleted the reference to timelines, on the grounds that timeframes for reporting on IMS data will necessarily vary from technology to technology. This will apply particularly between the near real-time technologies (seismic, hydroacoustic, infrasound) and time-delay technologies (radionuclide monitoring, where delays associated with initial air-transportation of radioactive particles, and with collection and processing, will be unpredictable). This detail should be dealt with in Operational Manuals tailored to the individual technology.

For paragraph 12 (f) to (i), we have drawn from paragraph 30 (c) to (f) (pages 74 - 75, CD/1364), removing brackets and streamlining to reflect what has already been covered in the preceding part of the paragraph. Note that we have slightly expanded the language in (g)

to include the idea that the Technical Secretariat's archival role should extend to its own reporting products (including data in hard form, eg filter samples).

Paragraph 12 (j) builds on the agreed language of paragraph 21 (d) (page 71, CD/1364). We have inserted a reference to the Technical Secretariat's role in providing technical services to facilitate national analysis of verification regime data, in recognition that some States Parties may require assistance in this area.

Paragraph 12 (k) is drawn from paragraph 31 (page 75, CD/1364). We judge this concept to be useful in the interests of ensuring the transparency of Technical Secretariat activities, participation of States Parties in the operation of the IMS, and the advancement of technology exchange for peaceful purposes.

Paragraph 12 (l) draws from elements of paragraphs 21 (e) and 22 (pages 71 - 72, CD/1364).

Paragraph 13 brings together references in the rolling text (scattered throughout elements now included in paragraph 12) to the need for the Technical Secretariat to discharge its responsibilities in accordance with relevant provisions contained in the Protocol and in the Operational Manuals. We believe that the presence of paragraph 13 in close proximity to para 12 is important in underlining that the functions set out in paragraph 12 will be conducted within parameters laid down elsewhere.

THE INTERNATIONAL MONITORING SYSTEM

PARAS 14-16

These paragraphs draw on paragraphs 17 - 20 of the existing treaty language on verification (CD/1364, pages 70 - 71).

Paragraph 14 is a streamlined version of agreed language. We have replaced the detail on the various monitoring technologies with a simple cross-reference to the Protocol, where we have placed the substantive references. The deletion of the references does not affect the stringency of the process needed to add or delete a monitoring technology which, pursuant to para 17 of our revised text, will be treated as a formal amendment of the treaty under Article IX ("Amendments").

Paragraph 15 is based on paragraph 18 (page 71, CD/1364). We have deleted the second sentence, which could be seen as giving insufficient weight to the central role of the IMS in the verification regime. We have removed the brackets around the last sentence, to reflect the strong convergence and the operational principle of fundamental importance within the Conference, that differing funding situations notwithstanding, all monitoring facilities should be owned and operated by the state taking responsibility for the facility. The slight rewording of the last sentence reflects the new agreed formulations contained in para 4 of the General Provisions part of the IMS chapter of the Protocol, and includes a cross-reference to these provisions. As in the Protocol, the formulation preserves the option of states which are not States Parties agreeing to take formal responsibility for the operation of a monitoring facility which is part of the IMS.

Most delegations have argued that institution of any different approach to the ownership of and operational responsibilities for IMS monitoring facilities would be to invite considerable administrative problems for the Organization (eg. in establishing proportional ownership of facilities spread across the globe) for no operational benefit.

We have deleted paragraph 19 (page 71, CD/1364) which is covered in paragraph 4 (b).

Paragraph 16 is mainly agreed language (paragraph 20, page 71, CD/1364). We have removed the brackets around the phrase which stipulates that States Parties may obtain on-line access to IDC data (as opposed to the interactive access specified in Part 5 of the Protocol) only at their own expense. The disadvantage of making on-line prioritised data access available to an individual State Party is that this service would require considerable expenditure for the Organization on computer hardware and communications. Such expenditure would be in effect at the expense of the IDC's effective servicing of other States Parties' regular data access requirements, and would therefore prove inequitable.

PARAS 17 - 19 (Changes to the International Monitoring System)

This section is drawn from paragraphs 24 - 27 of CD/1364 (pages 72 - 73). It reflects and elaborates the procedures outlined in Article IX ("Amendments") in relation to proposed modifications to the IMS. Our approach seeks to :

(a) recognize that the addition or deletion of a monitoring technology would constitute a major modification to the IMS

(b) elaborate which aspects of the IMS could enjoy simplified change procedures

(c) provide for a mechanism whereby the Director-General may, with the approval of the Executive Council, put in place stop-gap measures for maintenance of the International Monitoring System coverage pending longer term resolution of any problems (eg breakdowns).

In drawing up our approach, we have been mindful that States Parties will require maximum medium to long-term predictability for the incorporation of particular facilities into the IMS. States will wish to maximise returns from investments made in equipping and staffing monitoring facilities, minimise requirements for investment in new facilities, and to maximise long-term predictability in financial arrangements for the CTBTO bearing or sharing costs. In the normal course of events, therefore, we believe changes will not be lightly contemplated by States Parties or the Organization (although they are likely to be required from time to time as a result of emergent technical and even political considerations).

We have therefore differentiated between two types of modifications which can be made to the IMS:

. We have characterized the addition or deletion of a technology as a substantive issue, which shall be subject to the full treaty amendment process as described in Article IX. We can detect no practical requirement for a step as significant as the deletion or addition of a

monitoring technology to be subject to simplified change procedures, given the complexities of the technical issues involved, the capital investment represented by the original networks, and the long-term planning which would be required if any such proposal emerged.

. We have proposed that any modification of the numbers of facilities in the IMS, and other technical details, should be subject to the simplified change process described in Article IX ("Amendments", paragraph 8). When complemented by an effective "interim measures" mechanism as set out in para 20, we think the simplified change procedure should cope adequately with any required long-term changes to the IMS.

We have not maintained the idea put forward by one delegation (para 23, page 72, CD/1363) that the Director-General be authorized to implement modifications immediately after approval by the Executive Council. The proposal has attracted no support.

PARA 20 (Temporary Arrangements)

In paragraph 20, we have removed the brackets around and within paragraph 27 (page 73, CD/1364), which reflects proposals by a number of delegations that there be a provision to balance potential practical inflexibilities in the Amendments article's formal processes. This would permit the rectification of emergent shortcomings in the IMS on a temporary basis. It would be possible only with the agreement of the Executive Council, within the technical parameters of the Protocol (ie. no increase in the number of stations in a given global network) and the financial parameters of the annual budget. Such stop-gap arrangements could only be approved for a year's duration at a time (though such approvals could be renewable on this basis), and in the context of concrete proposals for long-term rectification of the shortcomings.

PARAS 21 - 22 (Co-operating national facilities)

In this section we have drawn on the language of paragraph 33 (page 75, CD/1364). The concept of co-operating national facilities was endorsed by the December 1995 IMS Expert Group meeting (CD/NTB/WP.283 p 10), as potentially useful to extend the base IMS network capability for event location and characterization in certain circumstances. We believe that the institution of co-operating national facilities could also have confidence building benefits in some regions.

There will in each case be value in ensuring that resulting data can be used effectively by the Organization and States Parties. We have adopted the recommendation of the IMS Expert Group that data from supplementary national monitoring facilities be put at the disposal of the IDC, following appropriate certification of the facility and data authentication measures as for an IMS facility. This would enable all data flowing from such a facility to be processed on an equal basis with that flowing from IMS facilities, and to be designated as "IMS data" for the purposes of the treaty. The Technical Secretariat would maintain and circulate to all States Parties a current listing of all "co-operating national facilities". As is appropriate for facilities not part of the agreed IMS, the costs of certification and authentication should be borne by the state volunteering the facility.

In the case of seismic facilities offered for use as for auxiliary network seismic facilities, the Organization would meet only the costs of transmission to it of data requested from the facility by the International Data Centre. For monitoring stations being offered to the Organization for operation in any other mode (eg. as additional sources of primary monitoring data, in an uninterrupted/on-line transmission mode), it would appear to be appropriate for the volunteering state to pay for all costs of data transmission to the IDC.

PARAS 23 - 27 (Funding the International Monitoring System)

This section reflects broad agreements now achieved in the IMS Drafting Group, and Working Group 1.

There is overwhelming support for the principle that the Organization should fund primary network monitoring facility costs as listed, but only in proportion to the contribution those facilities make to the IMS as compared with other national objectives. Application of this principle will require the Organization to reach agreement on practical modalities (most probably in the PrepCom phase) which would ensure that equipment and operating costs for solely national purposes are not transferred to the international community.

In the chapeau of paragraph 23 we have inserted the relevant cross-referenced table numbers.

In paragraph 23 (b), we have removed the brackets of the equivalent paragraph in the rolling text. We believe it is reasonable for the CTBTO to operate on a uniform and predictable basis with regard to station-maintenance . In our view, this wording does not prejudice the actual funding outcome in individual cases, nor the possibility that the application of uniform criteria to individual station and national circumstances may require varying funding outcomes.

The deletion of bracketing around the reference to payment "if appropriate" of monitoring facility physical security costs takes full account of the divergent views held: on one end of the scale, that such costs may in some circumstances be a legitimate international charge; on the other, that these costs (particularly relating to existing or auxiliary seismic stations) should be the responsibility of the state responsible for the facility. Our formulation accepts that facility security costs may need to be considered, but suggests that States Parties should reflect before activating the provision.

We believe that there is broad agreement that the principle that the Organization should fund data authentication (a process clearly only required for CTBT monitoring purposes) is reasonable. We have therefore removed the brackets.

For paragraph 23 (c) we have selected the option whereby the CTBTO would pay for the costs of direct transmission of IMS data from monitoring stations, national data centres and laboratories to the International Data Centre, but not cover in-country transmission costs of data other than radionuclide monitoring network samples. We judge that paying for in-country electronic data transmission costs would involve the CTBTO in complex, costly and administratively messy arrangements to support national communications infrastructures.

We have removed the brackets entirely from paragraphs 24 (c) and (d). It is recognised that the delineation of an auxiliary network of seismic stations by experts was within a mandate requiring maximum possible use of existing facilities. It is also recognised that where the required facilities do not yet exist, or require upgrading, a number of states already have programs in place which will go some way to covering the Treaty's needs prior to signature/entry into force without recourse to international supplementation. Nevertheless, technical work has made clear that in a small but appreciable number of cases significant expenditure of funds will be needed to ensure proper auxiliary network coverage of the globe. Equipment upgrades specifically to enable auxiliary seismic stations to meet CTBTO monitoring requirements, and the establishment of a few stations specifically to cover the CTBTO monitoring mission in parts of the world where no relevant facilities currently exist would seem to be an international responsibility (it being noted that new establishment costs would only be covered "if required", such a requirement being established in the course of States Parties future consultations on the annual budget and the development of the International Monitoring System).

In paragraph 25, we have inserted the appropriate cross-reference to the new Part 5 of the Protocol, dealing inter alia with IDC reporting product. We have also deleted the square brackets inserted by one delegation, our judgement being that if a State Party requires data beyond standard reporting products and beyond responses to a reasonable level of specific requests, the additional costs should reasonably be borne by the requesting State Party.

We have deleted the paragraph relating to the use of air-mobile laboratories, which has no support.

In paragraph 26, we have deleted the reference to the possibility that verification measures (and the international funding thereof, where appropriate) be contained in less formal "arrangements". Our preference is to follow the general model set out in other nuclear-related multilateral instruments, such as the IAEA Statute (Article XI.F), the NPT (Article III.4), and the treaties of Tlatelolco (Article 13) and Rarotonga (Article 8 and Annex 2), in which an agreement is the usual format.

CONSULTATION AND CLARIFICATION

PARAS 28-32

Paragraphs 41 to 46 of the Rolling Text (pages 78-79 of CD/1364) provide for a range of approaches to and mechanisms for consultation and clarification under the CTBT: a general provision for consultation and cooperation between States Parties or through the Organization or other appropriate procedures (para 41); a time-bound clarification process between States Parties (paras 42 and 43); provision for States Parties to request assistance from the Executive Council or Director-General to obtain clarification (para 44); and for a time-bound Executive Council assisted clarification process. Bracketed text contained in these paragraphs reflects a range of differing national preferences on (1) the relationship between consultation and clarification processes and on-site inspection procedures (i.e. whether a consultation and clarification process should be mandatory before an OSI); and (2) the scope of clarification processes (i.e. whether they are solely to clarify "ambiguous events" detected by the IMS or more broadly to clarify any "matter" or "situation" giving rise to a concern about possible non-compliance with the Treaty.)

Taking into account the range of concerns and preferences expressed by delegations, we have sought to develop a balanced framework for consultation and clarification under the CTBT which should provide effective mechanisms for timely clarification (and hopefully satisfactory resolution) of "ambiguous events" detected by the IMS and more broadly defined concerns about possible non-compliance with the Treaty, while at the same time minimising the possibility that such processes may be misused for purposes unrelated to the Treaty.

The key elements of this framework are as follows:

- A general provision for consultation and cooperation. (Paragraph 28)

- A time-bound process for any State Party to seek clarification from another State Party (48 hour deadline for response) concerning any ambiguous events detected by the IMS. (Paragraph 29)

- A compulsory time-bound (48 hours) consultation and clarification process conducted by the Director-General consequent upon any request for an OSI and parallel to the Executive Council's consideration of the request. (Paragraphs 42 and 43).

- Provision for States Parties to request assistance from the Director-General to obtain clarification of any situation which may be considered ambiguous or which gives rise to a concern about possible non-compliance. (Paragraph 30)

- At the request of any State Party, a time-bound Executive Council assisted process to obtain clarification from a State Party (48 hour deadline for response) concerning any situation which may be considered ambiguous or which gives to a concern about possible non-compliance. (Paragraphs 31and 32)

Some delegations have argued for a mandatory consultation and clarification process prior to a request for a OSI. Our judgment (shared by a number of other delegations) is that such a

provision would have a serious adverse effect on timelines for the conduct of inspections such that any opportunity to determine the existence or otherwise of time-critical phenomena generated by an nuclear explosion would be liable to be lost. Such an approach could significantly diminish the chance of early resolution of a concern about possible non-compliance with Article 1 of the Treaty and in our view is unlikely to command consensus.

Australia's view, and we believe the view of most countries, is that State Parties should as a rule make every effort to clarify and resolve any concern about non-compliance before a request for an OSI. A judgment as to whether or not such a process was practical prior to making an OSI request would depend on the particular circumstances of the case. What in our view is practical and desirable is a mandatory consultation and clarification process conducted by the Director-General parallel to the Executive Council's consideration of an OSI request. Within such a framework, the requested State Party would be required to respond within 48 hours to a request for clarification from the Director-General. The response of the State Party would be available to the Executive Council before a decision was taken on the inspection request (deadlines of 72 and 120 hours for requests for a short phase of an OSI or an extended phase of an OSI respectively). Provision for such a procedure has been made in paras 42 and 43 . The first sentence of para 2 of this Article has been drafted so that it is consistent with this approach which we believe represents an appropriate and effective balance between the concerns and preferences expressed by delegations.

Para 28 (CD/1364, page 78, para 41)

We have unbracketed the first and second sentences of this paragraph and have slightly reworded the last part of the latter sentence so that it is consistent with the related provisions of the subsequent paragraphs. We have deleted the third sentence of this paragraph as it is unnecessary to make a cross reference to the mandatory consultation and clarification process set out in paragraphs 42 and 43.

Para 29 (CD/1364, page 78, para 42)

In the light of the considerations outlined above, we have deleted the phase "Prior to a request for on-site inspection," from the first sentence of para 42 in favour of the alternative "Without prejudice to ... an on-site inspection" and have incorporated the words "should, as a rule make every effort ... " etc. Of the two bracketed formulations of the possible scope of a request for clarification, we have adopted the second alternative with the deletion of the words "that relate to the object and purpose of this Treaty" which would seem to some degree to pre-empt the clarification process. This paragraph thereby provides a basis for States Parties to obtain rapid bilateral clarification of ambiguous events detected by the IMS. In our judgment, a 48 hour deadline for States Parties to respond to a request for clarification is both practical and desirable. (A longer deadline would be likely to significantly diminish the likelihood, depending on the circumstances of the particular case, that States Parties would utilise this procedure prior to making an OSI request.)

The text of para 43, page 78 of CD/1364 has been incorporated into paragraph 29 with the addition of an appropriate reference to the responding State Party.

Para 30 (CD/1364, page 78, para 44)

The phrase "any situation relevant ... possible non-compliance of another State Party with this Treaty" is in our view appropriate in this paragraph. We have accordingly removed the square brackets from paragraph and the words "ambiguous events detected ... purpose of this Treaty." We have also deleted, of course, the words "Executive Council" and have made a minor grammatical change to the last sentence - deleting the word "its" and inserting the words "of the Technical Secretariat" after the word "possession."

Para 31 (CD/1364, page 78, para 45)

In this paragraph, we have similarly adopted the formulation of "any situation which may be considered ambiguous or which gives rise to a concern about its possible non-compliance". We do not consider it necessary to include an explicit reference to "concerns regarding apparently imminent non-compliance ... " which has been proposed by one delegation as we believe such a possibility is covered by the basic formulation without elaboration. The deadlines in sub-paragraphs (a), (b) and (c) satisfy the requirement for timely clarification of any concerns about possible non-compliance. We have also added the words "without delay" immediately prior to "about any request" in the final sentence of the paragraph.

Para 32 (CD/1364, page 79, para 46)

Agreed language. No change.

ON-SITE INSPECTIONS (OSI)

On-Site Inspection is widely acknowledged as the most complex issue remaining to be resolved in the CTBT negotiations.

The language on OSI contained in CD/1364 is heavily bracketed with almost all key provisions represented by conflicting options and permutations, few of which have attracted broad support. This state of affairs reflects the existence of a wide range of national preferences on almost all key aspects of this issue including the basic purpose and scope of inspections; the relationship between OSI and other elements of the CTBT verification system; the nature of the information which could be used as a basis for an OSI request; decision-making by the Executive Council (the trigger mechanism: i.e. "red light" versus "green light" procedures); the role of consultation and clarification processes; OSI phases (single phase or two phase concept), timelines for inspections; managed access and overflight provisions; technical evaluation of OSI requests and reports; and the conduct of inspections including verification activities and the employment of technologies within OSI phases.

Successful resolution of these complex issues will require flexibility and imagination, and a clear recognition of the inherent inter-relationships - and need for balance - between key elements of the OSI regime.

We have taken a holistic approach to OSI. Drawing to the greatest extent possible on familiar language and alternatives already contained in CD/1364, we have sought to demonstrate in our model text that it is possible to strike a number of basic and important balances to produce an OSI package which incorporates and gives practical expression to the following principles:

- OSI is an essential and integral part of the CTBT verification regime.
- OSI should deter against potential nuclear explosive non-compliance with Article 1 of the Treaty.
- OSI should be rare, concerns normally being resolved by consultation and clarification mechanisms.
- OSI should be timely and able to detect time-critical phenomena.
- OSI should be effective and based on an assumption of access, management of access being the exception.
- OSI should be conducted in the least intrusive manner possible.
- OSI should include robust procedures against abuse.
- OSI requests should be based on, and take into account, data made available to all States Parties.
- OSI should be cost-effective.

In developing a balanced OSI package we have taken into account both the view of many delegations that the Chemical Weapons Convention (CWC) provides useful precedents for the CTBT OSI regime, and the fact that some of the requirements for effective OSI under a CTBT differ from those of the CWC. Thus our package is characterised by both incorporation of significant elements of CWC-related language found in CD/1364, and some departure from CWC provisions reflecting the particular circumstances of the CTBT.

Overall we have sought to select a middle course through the divergent views and options reflected in CD/1364. We believe the result is an internally-balanced and credible package specifically tailored to the requirements of the CTBT and capable of meeting delegations' focal concerns.

The basic elements of the OSI package set out in the provisions of our model treaty and Protocol are as follows:

- The sole purpose of an OSI would be to clarify whether a nuclear weapon test explosion or any other nuclear explosion has been carried out contrary to Article I and, to the extent possible, facts relevant to the determination of responsibility for any such event.

- All environments (including in and over the high seas) would be covered by the multilateral OSI mechanism. All costs would be covered by the Organization.

- A two phase OSI concept providing for short and extended phases of inspections. A short (and relatively less intrusive) phase of an OSI would provide a basis for rapid clarification of a compliance concern. It would enable the inspection team to establish the presence or absence of time-critical evidence of a nuclear explosion while allowing the inspected State Party the opportunity to quickly demonstrate compliance. The option of an extended phase of an OSI would be available to address situations where more intrusive (and less time-sensitive) activities would be required to determine the existence or otherwise of evidence of non-compliance. A short phase of an OSI would as a rule precede an extended phase, but either phase of an inspection could be requested at any time.

- A request for either phase of an OSI would be submitted to the Executive Council and at the same time to the Director-General for the latter to begin immediate processing.

- An OSI request would require inclusion of a substantive basis for any compliance concern, reflecting States Parties joint establishment of a highly-capable global verification regime. A State Party would be required to submit a request in accordance with clear specifications including details concerning the nature and circumstances of a possible nuclear weapon test explosion or other nuclear explosion carried out contrary to Article 1, and all appropriate information on which the concern regarding possible non-compliance was based. Data collected by the IMS and/or other elements of the Treaty verification regime could be submitted as the basis for an OSI request.

- The inspection request and all the information contained in it would be circulated to all States Parties, including the requested State Party.

- Preparations for a short phase of an OSI would commence immediately upon the receipt of the request. Preparations for an extended phase of an OSI would commence immediately following approval of the request by the Executive Council.

- Executive Council consideration of a request for a short phase of an OSI would conclude no later than 72 hours after the request was received. Consideration of a request for an extended phase of an inspection would conclude no later than 120 hours after the request was received.

- A compulsory consultation and clarification process conducted by the Director-General would run parallel to the Executive Council's consideration of the request. The requested State Party would be required to provide the Director-General with explanations and other relevant information within 48 hours. The results of the consultation and clarification process would be available to the Executive Council within the time-frame of its consideration of the inspection request.

- The Executive Council decision making process would be determined by the phase of an OSI requested and the nature of the data presented by the requesting State Party as the basis of the request.

- For a request for a short phase of an OSI based in whole or in part on data collected by the IMS, the inspection would proceed unless the Executive Council decided by a two-thirds majority of members present and voting against carrying out the inspection ("red light" procedure).

- For a request for a short phase of an OSI based only on non-IMS data, the inspection would proceed only upon a decision by a two-thirds majority of the Executive Council members present and voting to approve the inspection ("green light" procedure).

- An extended phase of an OSI would be conducted only if the Executive Council approved the inspection by a majority of its members present and voting ("green light" procedure).

- The timelines would require the inspection team to arrive at the inspection area within 8 days of the submission of a request for a short phase of an OSI, and within 15 days for an extended phase of an OSI. If the request for a short phase of an OSI were made within 2 or 3 days of a suspected nuclear explosion, the mechanism should allow the inspection team to arrive at the inspection area in time to have a credible opportunity to detect any short-lived phenomena associated with a nuclear explosion.

- A short phase of an OSI would be limited to 20 days duration (from arrival at the inspection area), an extended phase to a period of 180 days. There would be provision for an extension of either phase if such an extension were considered essential by the inspection team and approved by a two-thirds majority of Executive Council members present and voting.

- The inspection area for either phase of an OSI would be subject to a limit of 1,000 km^2 and a distance of 50 km in any direction.

- The conduct of verification activities by the inspection team would be limited to those activities specified in the Protocol with the more intrusive and costly activities allowable only in an extended phase of an OSI.

- There would be a clear presumption of access to the inspection area being granted by the inspected State Party, subject only to well-defined exceptions under managed access provisions.

- The inspected State Party would have a right under managed access provisions to designate sensitive locations or sites within the inspection area as managed access areas (each designated area not exceeding 2.5 km^2 and subject to overall limits) to which the modalities of access by the inspection team would be subject to negotiation. The inspected State Party would have the right, under managed access, to take measures to protect sensitive installations. However, it would then be under an obligation to make every reasonable effort to demonstrate that any affected building was not used for activities non-compliant with Article I. It could also exclude the inspection team from the interior of buildings during a short phase of an OSI.

- The inspection team would have the right, subject to advance notification and certain limitations related to the managed access regime, to carry out overflights of the inspection area for the purpose of narrowing the area to be inspected and optimising ground-based verification activities.

- On completion of either phase of an OSI, the inspection team would report its findings through the Director-General to the Executive Council. A preliminary report would be required within 3 days and a final report no later than 14 days after completion of the inspection.

- There would be provision for appropriate redress in the case of a frivolous or abusive OSI request.

The structure of the OSI provisions of Article V reflects that of CD/1364 with some minor changes to sub-headings and some necessary changes to the order of paragraphs to ensure a logical arrangement.

Request for an On-Site Inspection (paras 33-36)
- Submission of an on-site inspection request (paras 37-38)
- Follow-up after submission of an on-site inspection request (paras 39-41)
- Consultation and clarification (paras 42-43)
- Executive Council consideration (paras 44-47)
- Follow-up after Executive Council consideration (paras 48-52)

Conduct of an On-Site Inspection (paras 53-59)
Observers (para 60)
Final Report of an On-Site Inspection (paras 61-67)
Measures to Prevent Frivolous or Abusive On-Site Inspection Requests or Measures for Redress (para 68)

Note: We have used the term "inspection area" rather than "inspection site" throughout our text as this more accurately characterises an area subject to a limit of 1000 km^2 and a distance of 50 km in any direction.

PARAS 33-36 (Request for an On-Site Inspection)

Paragraph 33 (which reproduces para 47, page 79 of CD/1364) establishes the basic right of each State Party to request an On-site inspection. We have added the words "with this Article and the Protocol to this Treaty" prior to "in the territory" to make it clear that the general right to request an OSI relates to the entire Article and to the relevant parts of the Protocol. We have removed the brackets from the phrase "or any area beyond the jurisdiction or control of any State". The issue of responsibility for conducting inspections in areas beyond the jurisdiction or control of any State is discussed in the explanatory notes on paragraphs 98 to 102 of the Protocol - "Conduct of Inspections in Areas not under the Jurisdiction or Control of any State".

Paragraph 34 is the key provision of the Treaty which defines the purpose of an on-site inspection. Bracketed alternatives in para 50, page 80 of CD/1364 reflect a wide diversity of opinion on the purpose of OSI, ranging from the broad concept of determining facts relating to possible non-compliance, through clarification as to whether a nuclear explosion has been

carried out in violation of the Treaty, or whether or not an ambiguous event detected by the IMS was a nuclear explosion carried out in violation of the Treaty's basic obligations.

This paragraph is very closely related to the basic obligations of the Treaty and we have sought to provide a clear and uncomplicated statement of the purpose of an OSI directly connected with the basic obligation of State Parties under our Article 1 not to carry out or in any way participate in carrying out any nuclear weapon test explosion or any other nuclear explosion. The inclusion of the words "and, to the extent possible, facts relevant to the determination of responsibility for any such event" makes it clear that the inspection team would be required to seek factual information not merely to clarify whether or not a nuclear explosion had taken place, but also facts on which the Executive Council could appropriately make a determination concerning compliance. We have not used the word "violator" (debracketing of which in para 50, page 80 of CD/1364, was provisionally agreed in Working Group 1 of 7 February 1996), because its use, highly unusual in a multilateral treaty, tends to pre-empt the full process of making any determination concerning compliance.

Other issues such as the type of information which could be presented as the basis for an OSI request (implicit in sub-para 50 (3), page 80 of CD/1364) are in our view more logically dealt with in the Treaty and Protocol provisions relating to the basis for submission of requests.

Paragraph 35 establishes a two phase approach to OSI. This basic concept has attracted interest and support from a number of delegations as a framework within which a satisfactory balance could be struck between considerations of timeliness, effectiveness, intrusiveness and cost-effectiveness in the OSI regime. As developed in this paragraph, a short (and comparatively less intrusive) phase of an OSI would provide the basis for, if possible, rapid clarification of a compliance concern. It would enable the inspection team to collect any time-critical evidence of a nuclear explosion (short-lived radionuclides, aftershocks) while allowing the inspected State Party the opportunity to quickly demonstrate compliance. The option of an extended phase of an OSI would be available to address situations where more intrusive and costly activities would be required to determine the existence or otherwise of evidence of non-compliance (most obviously, but not exclusively, situations where the passage of time prior to the inspection request has been such that time-critical phenomena produced by a nuclear explosion would have disappeared by the time the inspection team commenced the inspection). In normal circumstances, we would expect that an inspection would be conducted in sequential phases, i.e. that a short phase of an inspection would be conducted, following which, if the compliance concern remained unresolved, a second extended phase might be requested. In view of the potentially unique circumstances of a concern about possible non-compliance with Article 1 of the Treaty, however, it is desirable, indeed essential, that a phased approach to OSI should allow for flexibility in the sequence of inspection phases to ensure that, subject to Executive Council consideration, the most effective means are available to quickly clarify a compliance concern.

In paragraph 35 we have adapted and revised the language of para 48, page 79 of CD/1364. To avoid confusion in the designation and sequence of inspection phases, we have replaced the phrases "an initial phase" and "a second phase" with "a short phase" and "an extended phase" respectively, the duration of the inspection being a key distinction between the two phases. (Consequent changes have been made elsewhere.) The second sentence of para 48 has been replaced with a formulation which reflects the expectation that a short phase of an

OSI should "as a rule" precede an extended phase, while preserving the option for either phase to be requested at any time.

Paragraph 36 reproduces paragraph 49, page 80 of CD/1364. We have removed the brackets from around the words "on the basis of which a concern has arisen regarding possible non-compliance with this Treaty" as this makes it clear that the information provided pursuant to paragraph 6 relates to a concern regarding possible non-compliance with the Treaty, not merely an ambiguity or uncertainty.

PARAS 37-38 (Submission of an on-site inspection request)

Paragraph 37 reproduces para 51, page 80 of CD/1364. We have deleted brackets from the words "and at the same time to" and have deleted the alternative of "through". Paragraph 37 consequently provides for an immediate commencement of processing of an inspection request by the Director-General - an essential first step for the timely commencement of the activities set out in paragraphs 39-43. We have deleted the bracketed words "prior to the Executive Council decision" which are unnecessary.

Paragraph 38: Bracketed language in para 52, page 80 of CD/1364 reflects the broad differences of view between delegations on the nature of the information which may serve as the basis for an OSI request. Some delegations argue that only data collected by the IMS should be allowable as the basis of an OSI request while others argue that data collected by other elements of the Treaty verification regime or other relevant data made available by States Parties should be allowable. Bracketed requirements that data should be "analysed" and to "technical" data reflect a desire of some delegations to further characterise the nature of the information on which an OSI request could be based.

Consistent with the balanced approach set out in paragraphs 70-71 (International Exchange of Other Relevant Information) we have revised the language of the first sentence of para 52, page 80 of CD/1364 to provide in paragraph 38 that requests "shall be based on the data collected by the International Monitoring System and/or by other elements of the Treaty verification regime in accordance with the provisions of this Treaty and its Protocol". We have not included the words "and analysed" as there may be cases where IMS data has not been analysed by the IDC, but which a State Party may wish to use as the basis for an OSI request. For example, an event may be registered by an auxiliary seismic station and a State Party may decide to proceed with an OSI request on the basis of the resultant data.

Paragraph 38 is part of a package of inter-related elements including the specifications for inspection requests in paragraph 53 of the Protocol, the requirement that the inspection request (and the information on which it is based) be circulated to all States Parties including the requested State Party, and the provisions for Executive Council consideration of OSI requests which differentiate between requests on the basis of the phase of an inspection requested and the information on which the request is based. Taken together, these provisions are designed to explore the middle ground between the range of preferences and concerns expressed by delegations concerning the information which may be used as the basis for OSI requests. Most delegations recognise that non-IMS data would have a role to play in the OSI process, at least as evidence to be presented by the inspected State Party during consultation and clarification. We would expect non-IMS data and information to feature in the requested State Party's response to the Director-General in the mandatory

consultation and clarification process pursuant to paragraphs 42 and 43 and it would appear implausible to suggest that States Parties would confine their consideration of a request to one particular category of data. OSI requests preferably should be based on all relevant information and the process by which they are considered should be open and transparent to provide for maximum possible access to relevant facts and objective assessments by States Parties. We believe that this package of inter-related elements offers a firm basis to ensure that OSI requests are based on objective information available to all States Parties.

PARAS 39-41 (Follow-up after submission of an on-site inspection request)

Based on paragraphs 59, 53 and 61, pages 81-82 of CD/1364 respectively, these paragraphs set out procedural steps following the submission of an OSI request, but preceding any decision by the Executive Council. In paragraph 39, we have removed the brackets from the second sentence of para 59, page 81 of CD/1364 (and the word "thereafter"). Paragraph 40 is based on the second sentence of para 53, page 80 of CD/1364 and reflects the practical requirement for an immediate commencement of preparations for a short phase of an OSI if timely arrival at the inspection area is to be achieved. The commencement of preparations is subject to the receipt of a request which meets the requirements specified in paragraph 31 of the Protocol thus ensuring that a partial or incomplete request does not act as a trigger for preparations. (An extended phase of an on-site inspection would be less time-critical in its nature and the third sentence of para 53 is located in paragraph 48, dealing as it does with action after Executive Council consideration of an inspection request.) Based on para 61, page 82 of CD/1364, paragraph 41 is designed to ensure that (through the Director-General) the Executive Council's consideration of an OSI request is informed by the most up-to-date data available from the IMS (for example, radionuclide monitoring) or "other elements of the Treaty verification regime in accordance with the Provisions of this Treaty and Protocol which is relevant to consideration of the request" - this provision being consistent with that in paragraph 38 and paragraphs 69-70 (International Exchange of Other Relevant Information).

PARAS 42- 43 (Consultation and clarification)

Paras 54 to 58, page 81 of CD/1364 in essence propose establishment of a mandatory process of consultation and clarification and technical evaluation, the result of which in the form of a report by the Director-General would then serve as the basis for the Executive Council's consideration of the inspection request. Although such an approach has some support, it has considerable disadvantages, notably the effect of injecting considerable delay into the timeline for consideration of an OSI request and effectively excluding potential detection of time-critical phenomena generated by a nuclear explosion. We would also question the appropriateness of a provision for the Executive Council to base its consideration of an inspection request by a State Party on a report by the Director-General rather than the request itself, and we consider this provision unlikely to achieve consensus.

There is of necessity a balance to be struck at this point in the OSI process between considerations of timeliness on one hand and the desirability of consultation/clarification and technical evaluation processes on the other. As discussed in our explanatory notes on paragraphs 28 to 32 (consultation and clarification), we favour a mandatory consultation and clarification process conducted by the Director-General parallel to the Executive Council's consideration of the inspection request. The requested State Party would be required to

respond within 48 hours to a request for clarification from the Director-General and that response would be available to the Executive Council to inform its consideration prior to a decision (within 72 hours for a request for a short phase of an OSI, within 120 hours for an extended phase of an OSI paras 45 and 46). A parallel technical evaluation process would not appear to be a viable or credible option within these necessarily tight time-frames as per paragraphs 45 and 46.

In the light of the above considerations, paragraphs 42 and 43 are based on paras 54 and 55, page 81 of CD/1364 respectively. We have deleted the reference to "technical evaluation" from the sub-heading in CD/1364 and have removed the square brackets from para 54 and have deleted the second sentence (which refers to a technical expert evaluation). Similarly we have removed the square brackets from para 55 and have replaced the bracketed deadline of 5 days with "48 hours". We have also added an appropriate sentence requiring the Director-General to communicate the clarification and any other information received from the requested State Party to the Executive Council without delay. Paras 56-58 of CD/1364 have been deleted.

PARAS 44-47 (Executive Council consideration)

Paragraph 44 is based on a rewording of bracketed formulations contained in para 60 of CD/1364. As revised it provides for the Executive Council to begin its consideration of an OSI request "without delay" (which appears more realistic than the word "immediately") and to take "cognizance of all activities in regard to" an OSI - the latter formulation being more relevant and likely to command consensus than the proposal that the Executive Council should "supervise all activities in regard to" an OSI.

Paragraph 45: Paras 62-67, pages 82-83 of CD/1364 contain a range of options for the key provisions of the Executive Council decision-making process. These bracketed alternatives reflect the wide range of national preferences on the triggering process for OSI ("red light" versus "green light") and the structure of inspection regime (single or two phase OSI concept). In seeking to develop a mechanism which will both command consensus and allow the timely and effective consideration of inspection requests within a two-phase OSI regime, we developed the following approach in which the decision-making process would be determined by the phase of an OSI requested and the nature of the information presented by the requesting State Party as the basis for the request.

- For a request for a short phase of an OSI based in whole or in part on data collected by the IMS, the inspection would proceed unless the Executive Council decided by a two-thirds majority of members present and voting against carrying out the inspection ("red light" procedure).

- For a request for a short phase of an OSI based only on non-IMS data, the inspection would proceed only upon a decision by a two-thirds majority of the Executive Council members present and voting to approve the inspection ("green light" procedure).

- An extended phase of an OSI would be conducted only if the Executive Council approved the inspection by a majority of its members present and voting ("green light" procedure).

Paragraphs 45 and 46 draw on language contained in paras 62 and 64, page 82 of CD/1364 respectively. This combination of a two-phase OSI concept with a "red light" / "green light" trigger mechanism which distinguishes between inspection requests on the basis of the information presented by the requesting State Party has attracted considerable interest as a basis for convergence in the negotiations on the closely related issues of the information allowable as a basis for an OSI request and provisions for Executive Council decision-making. In our view this approach strikes a good balance between the important principles of timely handling of a request and protection against abuse. It would also give States Parties a significant incentive to base any urgent (short phase) OSI request at least in part, if not totally, on data collected by the IMS, thus encouraging States Parties to rely in the first instance on the operation of the IMS. At the same time, consistent with the view that the CTBT verification regime should make effective use of all relevant information, such a decision-making structure would also provide an appropriate mechanism for dealing with a similarly urgent request based solely on non-IMS data. It would provide the basis for an effective and equitable decision-making process in which the requirements for approval or disapproval of requests would neither be set unreasonably high nor low taking into account the duration and possible intrusiveness of the proposed inspection and the nature of the information presented as the basis of the request.

Paragraph 47: Agreed language (para 67, page 83 of CD/1364).

PARAS 48-52 (Follow-up after Executive Council consideration)

Paragraph 48 is based on the last sentence of para 64, page 82 of CD/1364 and the third sentence of para 53, page 80 of CD/1364. This paragraph logically provides for the cessation of preparations for a short phase of an OSI (commenced pursuant to para 8) in the event of Executive Council disapproval of the inspection request and for the commencement of preparations in the case of a decision to approve an extended phase of an OSI.

Paragraph 49 combines language and concepts from paras 68 and 69, page 83 of CD/1364. It provides that inspections shall be conducted "without delay" by an inspection team designated by the Director-General and in accordance with the procedures for OSI set out in the Protocol (para 68 of CD/1364). The deadlines for the inspection team's arrival at the point of entry (7 days from the receipt of the inspection request for a short phase of an OSI, 14 days for an extended OSI) are in our view both practical and appropriate, reflecting the requirement for a short phase of an inspection to be conducted in time to collect any time-critical evidence and the likely requirement of more lengthy preparations in the case of an extended phase of an OSI.

Paragraph 50 is based on the first sentence of para 70, page 83 of CD/1364. The remainder of the para which refers to inclusion of an approved inspection plan in the Director-General's notification has been deleted. In our view the plan for an inspection is an operational document which would be drawn up by the inspection team subject to the purpose of the inspection and the mandate issued by the Director-General pursuant to paragraph 54. Finalisation of the inspection plan would be dependent on many factors, some of which

(including weather and logistical arrangements) may only be determined shortly before the inspection team's arrival at the point of entry.

Paragraph 51 is based on para 71, page 84 of CD/1364 The bracketed reference to Executive Council approval of the inspection is redundant and has been deleted. The requirement of "not less than 12 hours" notice of arrival at the point of entry is the same as the equivalent provision in the CWC (Article IX, para 15) and in our view is appropriate in the CTBT in view of the importance of timely movement by the inspection team to the point of entry and from there to the inspection area. In the normal course of events it could be expected that more than 12 hours notice could and would be given.

Paragraph 52 has been added to fill in the time-lines from the inspection team's arrival at the point of entry to its arrival at the inspection area. The period of 24 hours is the same as that for challenge inspections under the CWC (para 15 (b), Part X of the CWC Verification Protocol). The timeframe is in our view appropriate for the CWC where certain procedures would need to be conducted at the point of entry including checking of equipment, pre-inspection briefing, notification of and consultation on overflights, commencement of discussions on managed access etc).

PARAS 53-59 (The Conduct of an On-Site Inspection)

Paragraph 53: We have slightly amended para 72, page 84 of CD/1364, deleting the words "annexed" and "(trigger mechanism, managed access et al)".

Paragraph 54 is a reworked version of para 74, page 84 of CD/1364. It provides for the Director-General to "issue" rather than "draft" the inspection mandate. We presume the latter alternative relates to the idea that the mandate would be subject to approval by the Executive Council - in our view an unnecessary step for an operational document which is required to conform with the inspection request. We have also removed the reference to the "scope of the inspection" which is redundant in relation to the second sentence of the revised paragraph.

Paragraph 55: We have deleted the bracketed words "and Annexes thereto" from the first sentence of para 75, page 85 of CD/1364. We have also deleted the three alternative suggestions as to how to describe the objective of the inspection team's work in favour of the simple formulation "its mission".

Paragraph 56 (new language) establishes time-frames for carrying out inspections: 20 days for a short phase of an OSI, 180 days for an extended phase of an OSI. A number of countries have proposed a range of time-frames for the conduct of inspections which reflect preferences and judgments concerning the structure of the OSI regime (one or more inspection phases) and uncertainty concerning possible verification activities. In our judgment, the above deadlines are consistent with both the objective of minimising the duration (and thus intrusiveness of inspections) while ensuring that sufficient time would be available for the inspection team to conduct the activities specified in paragraph 77 of the Protocol (including drilling in the case of an extended phase of an OSI). In the normal course of events we would expect that consistent with the requirement to conduct inspections "without delay" a short phase of an OSI could take less than 20 days and it is similarly likely that an extended phase of an OSI would be completed in a period considerably less than 180 days. Given the uncertain circumstances and hence precise duration of any on-site inspection

under the CTBT, however, it would be unwise to reduce the time-frames of inspections to the barest minimum. Some margin for delay seems essential to minimise the risk that an inspection team, faced for example with adverse weather or logistical difficulties or as a consequence of an accident, is unable to complete an inspection within the stipulated time-frame - and thus unable to clarify the compliance concern which prompted the inspection request.

Paragraph 57 (new language) provides for the inspection team to seek, through the Director-General, approval from the Executive Council for an extension of time if it considers such an extension is "essential" to enable it to fulfil its mission. (Up to 10 days for a short phase of an OSI, not more than 30 days for an extended phase). Recourse to such an option would be preferable to a further inspection request (which would presumably involve the inspection team leaving and then, subject to Executive Council approval of the new inspection, re-entering the inspection area). Any extension of time would require the approval of a two-thirds majority of members of the Executive Council present and voting.

Based on para 73, page 84 of CD/1364, paragraph 58 sets out the basic rights and obligations of the inspected State Party. We have selected the "In the course of" option in the chapeau (and de-bracketed the word "and"), in recognition of the fact that the rights and obligations set out in sub-paras (a) to (c) arise in the context of an on-site inspection. Consistent with the approach taken in paragraph 54, we have deleted the bracketed word "approved" from sub-paras (a) and (b). We have selected the "purpose of the inspection" option in sub-para (b) and the "this Treaty" alternative in sub-para (c), the latter choice in recognition of the principal that an inspected State Party should not have the right to prevent disclosure of information that would indicate non-compliance with the Treaty on the grounds that such information was not related to the specific concern which triggered the inspection request.

Paragraph 59 is based on para 76, page 85 of CD/1364. The first unbracketed sentence is unchanged. We have redrafted the second bracketed sentence to eliminate the bracketed words "full and comprehensive" access in line with the key principle that access is presumed, with management of access being the exception. Our wording also preserves the key principle that any limitation on access to the inspection area carries with it an accompanying proportional obligation to make every effort through alternative means to demonstrate compliance with Article 1 of the Treaty.

We have deleted para 77, page 85 of CD/1364 which, if adopted, would establish a free-standing inspected State Party right to exclude, restrict or exempt rather than to manage access. Such an approach runs counter to the clear presumption of access, subject only to well-defined exceptions under the managed access provisions of the Protocol, which is a key element of our overall OSI package. We have also deleted para 78, page 85 of CD/1364. The size of the inspection area is defined in paragraph 55 of the Protocol.

PARA 60 (Observers)

In this paragraph we have reproduced the unbracketed language of para 79, page 85 of CD/1364 with alteration of changing the three references to "the" inspected State Party to "an" inspected State Party. This covers the possibility of inspections of areas beyond the jurisdiction of any State.

We have deleted para 80, page 86 of CD/1364 which relates to a proposed provision for States Parties rather than the Organization to conduct inspections in areas beyond the jurisdiction or control of any State. (para 83, page 86 of CD/1364 has been similarly deleted.) The issue of responsibility for conducting inspections in such areas is discussed in the explanatory notes on paras 98 to 102 of the Protocol - "Conduct of Inspections in Areas not under the Jurisdiction or Control of any State".

PARAS 61-67 (Final Report of an On-Site Inspection)

Paragraph 61 reproduces para 81, page 86 of CD/1364. We have removed the brackets from the phrase "for either phase of an on-site inspection".

Paragraph 62 substantially reproduces para 82, page 86 of CD/1364 with the deletion of bracketed references in the first sentence to a technical evaluation prior to the submission of the report.

Paragraph 63 is based on para 85, page 87 of CD/1364. We have deleted the bracketed references in the chapeau to "and its evaluations and assessments" and inserted the word "final" to make it clear that the final report for either phase of an OSI (and not the preliminary report pursuant to paragraph 117 of the Protocol) would be the subject of the Executive Council's review. We have inserted the words "not later than 10 days after the receipt of the report" to provide for a timely conclusion to the Council's review and have chosen the words "address any concerns as to" rather than "decide, inter alia" to take into account the possibility that, in the event of an inconclusive inspection report, the Council may be unable to reach any "decision". We have removed the brackets from sub-paras (a), (b) and (c).

Paragraph 64: We have removed the square brackets from the words "as applicable" in para 86 of CD/1364. We have added the words "without voting" at the end of the paragraph to make it consistent with the wording of paragraph 47.

Paragraph 65 reproduces the first sentence of para 87, page 87 of CD/1364. The bracketed second sentence has been deleted because the issue measures for redress in relation to abuse is dealt with in paragraph 68.

Paragraph 66 reproduces para 89, page 87 of CD/1364 with an appropriate cross-reference to Article III.

PARA 67 (Measures to Prevent Frivolous or Abusive On-Site Inspection Requests and Measures for Redress)

This paragraph substantially reproduces the text of para 91, pages 87-88 of CD/1364 with the deletion of references to decisions by the Executive Council to "determine" or "implement" measures in favour of provision for the Executive Council to recommend measures for decision by the Conference of States Parties. In our view the possible measures listed in sub-paragraphs (a) to (c) in conjunction with the decision-making procedures of the Executive Council provide a satisfactory deterrent to abusive and frivolous inspection requests . We have also taken the view consistent with our approach to the powers and functions of the Executive Council contained in Article III that decisions to require a State

Party to pay for the cost of any preparations for an OSI, suspension of the right to request an OSI or to serve on the Executive Council for a period of time are appropriately matters for decision by the Conference of States Parties. We have deleted the last sentence of para 91 which we consider unlikely to command consensus.

ASSOCIATED MEASURES AND INTERNATIONAL EXCHANGE OF OTHER RELEVANT INFORMATION

PARA 68 (Chemical Explosions and Regional Seismic Cooperation)

This chapeau paragraph (giving a treaty-level head of authority for the Protocol provisions which would in turn elaborate on the nature of "associated measures" relating to chemical explosions) has not been opposed.

The suggestion for an additional sub-paragraph (68 (c)), stressing the regional value of cooperation in this field is a useful addition and has not been opposed.

PARAS 69 - 70 (International Exchange of Other Relevant Information)

There are broad differences of view within the Conference on the extent to which States Parties should have access to data - other than that obtained by the Organization directly from the International Monitoring System - as a basis for requesting On-Site Inspections and coming to determinations on compliance and redress in accordance with Article VI ("Measures to redress a situation and to ensure compliance"). Some delegations argue that only IMS data should be permitted. Others argue that information from any source is permissible for use by States Parties. Some delegations have made a point of stressing the wide range of relevant non-IMS information which could be valuable in ensuring global compliance with the CTBT.

We have developed a package which paves the middle ground between the range of preferences expressed by delegations. We believe that our approach should be sufficient to ensure that the international exchange of other relevant information - both technical and from other potential sources - will be beneficial to all States Parties, including through a transparent and agreed structure which enhances States Parties' equal access to such information while restricting possibilities for abuse. Delegations already recognise that such information will inevitably play a role in States Parties coming to conclusions, and we consider it preferable that the information be managed in a predictable manner which promotes maximum possible access to relevant facts and objective assessments by States Parties.

Our package for the international exchange of other information relevant to the Treaty:

. permits States Parties to gain access to any information having a direct and significant bearing on Treaty compliance, whether or not that information is sourced directly from the IMS

. in particular, permits States Parties to gain access to relevant technical information and data flowing from non-IMS verification technologies. We have in mind those

verification technologies which are effective, but for which there currently is no consensus for their inclusion in the IMS (essentially for cost reasons), eg satellite and EMP monitoring

. would be located within the Treaty's verification regime in the same general category as "Associated Measures", thus removing entirely any reference to or association with the controversial and misleading term "national technical means" in paragraph 1 of the Treaty language on Verification.

. minimises the risks of abuse of such international exchanges of relevant data by putting in place a series of measures

(a) ensuring equitable access by all States Parties to the data concerned so that States Parties are able to exercise quality control

(b) obliging each State Party to exercise its best endeavours to make available to other States Parties, via the Technical Secretariat and on terms mutually agreeable to the donor State Party and the Technical Secretariat, any other relevant technical information available to it

(c) ensuring that States Parties are aware that this information is not from the IMS

Our two paragraphs draw upon existing Rolling Text language, namely paras 34 and 35, and Part 8 of the IMS section of the Protocol (pages 76 and 99 - 100, CD/1364). Substantial new elements of text have been added in accordance with our proposed approach as outlined above.

Paragraph 69 chapeau is entirely new language, and suggests that following acceptance of the general principles set out in the following paragraphs, some further elaboration of mechanisms might be needed in the Protocol. It makes clear that the obligations following are assumed on a "best endeavours" basis, and relate to technical information and data relevant to the verification of the basic obligations of the Treaty.

Paragraph 69 (a) largely reproduces paragraph 34 of CD/1364, page 76.

Paragraph 69 (b) draws on the text of paragraph 32 of Part 8 of the IMS Protocol. The "best endeavours" chapeau takes into account that in all cases States Parties will not necessarily be in a position to provide such data. We do however see such a provision as potentially important in keeping open the option of using satellite and other sensors not currently considered for inclusion in the IMS. Such an avenue will help increase confidence in the future as to full compliance with the Treaty in the upper atmosphere/space environment.

Paragraph 70 is substantially new language, building upon paragraph 35 (page 76, CD/1364). This drafting is extended to cover the case of detection of relevant events beyond the technical detection capabilities of the IMS, which we think is a legitimate potential concern. The paragraph goes on to spell out in some detail other mechanisms which could help to guard against any possible abuse of the exchange of other relevant information (eg. separate processing in the Technical Secretariat; all such information contributed made available to all States Parties).

EXPLANATORY NOTES

MEASURES TO REDRESS A SITUATION AND TO ENSURE COMPLIANCE, INCLUDING SANCTIONS

N.B. Paragraph, sentence and line numbers refer to CD/1364

The key outstanding question concerns the respective roles of the Conference of the States Parties (COSP) and the Executive Council (ExCo). There is broad support for the COSP having the basic power to take compliance measures, with the ExCo having a role essentially in informing and recommending action to the COSP. There is also some support for the ExCo being empowered, concurrently with the COSP, to take measures to ensure compliance in cases of particular gravity and urgency (see para 4).

The advantage of the ExCo being given some responsibility to act on compliance matters is that it can meet at short notice, and thus deal more quickly with urgent cases than could the COSP. The disadvantage is that in cases where only the ExCo takes action, not all States Parties are involved in the process. Most delegations would prefer all States Parties to have the opportunity to be involved in all issues arising under the Treaty, to the extent practicable. Hence the broad support for the COSP having the basic power to take compliance measures.

PARA 1

Assuming that the ExCo will be given some, albeit limited, power to take compliance measures (even if only in respect of para 4), this para should logically make reference to the ExCo as well as the COSP, since it is of a general, introductory nature. Some delegations, in supporting the principle of the COSP having the primary role in compliance, have argued that only the COSP should be referred to in para 1. The problem with this is that it could imply an *exclusive* rather than primary role for the COSP. Implying an exclusive role for the COSP would be inconsistent with the ExCo role envisaged under para 4. We have therefore removed the brackets around "and the Executive Council" in lines 1 and 6.

We have removed the brackets around the phrase "information .... Council" in the second sentence. We believe that the type of information referred to is relevant and appropriate for the purpose of considering action pursuant to this para.

We have deleted footnote 1, since the notion of an Executive Council is now broadly accepted.

PARA 3

We have deleted the bracketed word "serious" in line 1. Several delegations have opposed its inclusion, largely on the grounds of redundancy. *Any* case of non-compliance with the basic obligations of the Treaty which resulted in "damage to the object and purpose of this Treaty" would, by definition, result in serious damage. It is true that the damage to the Treaty arising from cases of non-compliance will vary and that not all such damage would be termed "serious" (as cases of non-compliance may range from failure to pay an assessed

contribution to the CTBT Organisation, to a nuclear test). However, the purpose of this paragraph - i.e. to deal with cases which may cause genuinely serious damage - is implicit in the references to ''basic obligations'' and ''damage to the object and purpose of this Treaty''.

We have slightly reworded the reference to the COSP's power to recommend collective measures to States Parties in order to allow the COSP to take such action in the absence of an ExCo recommendation. This removal of the exclusive ExCo power to trigger paragraph 3 action is consistent with the principle that the COSP is to take the primary role for compliance measures.

We have deleted footnote 2, since the proposal contained therein does not add any substance to the provision. If States Parties consider that a particular breach may result in the withdrawal of a nuclear weapon State or "nuclear advanced" State, and that such withdrawal would damage the object and purpose of the Treaty, they would have the means to act without recourse to the formula proposed in this footnote.

PARA 4

A range of delegations see merit in the ExCo being empowered to take compliance action in cases of particular gravity and urgency, as noted above. The advantage is that the ExCo, being able to meet at short notice, is better placed than the COSP to address urgent cases. We have therefore deleted the brackets around the reference to the ExCo.

We have deleted footnote 3. This proposal was, we understand, designed to ensure that the ExCo would have the power to bring issues to the attention of the UN Security Council. This concern is covered by the formula which empowers the ExCo to act in urgent cases.

EXPLANATORY NOTES

SETTLEMENT OF DISPUTES

Our model text is identical to the unbracketed article contained in the Rolling Text (CD/1364). (Cross-references to relevant Article numbers have been inserted.)

EXPLANATORY NOTES

REVIEW OF THE TREATY

There are two proposals on this topic:

- The first is in the form of a draft article
- The second is in the form of a provision comprising a paragraph within the Organisation article (in the Conference of the States Parties "Composition, procedures and decision-making" section, para 18, page 49, CD/1364).

Most delegations seem content to have a separate article on review.

While the two proposals are similar in substance there are a few differences.

- Under the first proposal, the first review conference is convened automatically, whereas under the second proposal, the convening of the first review conference requires simple majority support of the Conference of the States Parties.
- Under the first proposal, the convening of subsequent review conferences requires States Parties separately to submit proposals to the Depositary, whereas under the second proposal the convening of subsequent review conferences is a matter for decision by the Conference of the States Parties.
- Under the first proposal there is no stipulation regarding timing of review conferences, whereas under the second proposal all review conferences are to be held immediately following a regular session of the Conference of the States Parties.

Our assessment is that the second proposal tends to downgrade the importance of review conferences, by incorporating the provision within another article, and by eliminating the automaticity of the convening of the first review conference. For this reason we think the first proposal, namely for a separate article on Review, is most likely to attract consensus support.

We have therefore adopted the first proposal (the separate article), but have added one element from the second proposal (see notes under para 3).

PARA 1

We have deleted the bracket before the title of the article (which applied to the whole article), together with the footnote (covering the second proposal, which we have not adopted).

We have deleted the bracketed phrase "and the issues related to the Treaty such as nuclear disarmament". This was proposed by one delegation and has attracted no explicit support. *All* issues related to the Treaty (which could encompass nuclear disarmament issues) will in any case be taken into account at review conferences. But it will be up to the review conference itself to set its specific agenda. It is not feasible to give examples, in the Treaty

itself, of all the issues a review conference might address, and not desirable to seek to do so selectively.

We have removed the brackets, including internal brackets, around the phrase "with a view to assuring that the object and purpose of the Preamble and the provisions of the Treaty are being realized". The reference to the "Preamble and provisions of " (the Treaty) is technically redundant. But several delegations wish to retain it because they believe it emphasises the fact that reviews should be comprehensive. While we would not wish the inclusion of the phrase in this instance to be precedent-setting (i.e. we would not want all references to "the Treaty", throughout the text, to be preceded by the phrase "Preamble and the provisions of") we think it could be useful in this context. Its inclusion obviates any perceived need to list specific examples of possible review topics.

We have deleted the bracketed sentence at the end of para 1, which reads "Such review shall take into account any new scientific and technological developments relevant to the Treaty". As stated above, it is neither feasible nor desirable to list examples of issues related to the Treaty which should be addressed at review conferences.

PARA 2

We have removed the brackets around the words "with the same objectives", and deleted the bracketed alternative phrase "to review the operation of the Treaty, with a view to assuring that the object and purpose of the Preamble and the provisions of the Treaty are being realized". The phrase we have retained is intended to provide a streamlined, comprehensive alternative to repeating the language of para 1. This approach has not been opposed, and in the interests of brevity we have adopted it.

We have removed the bracket at the end of this para (which applied to the whole article).

PARA 3

This is a new para which we have added, comprising the following sentence: "All review conferences shall be held immediately following a regular session of the Conference of the States Parties". This is lifted from a section of the proposal for a review provision incorporated within the Organization article. We consider it a useful addition because by holding review conferences back to back with regular sessions of the Conference of the States Parties, resources should be conserved. This should create no problems in practice since, as has been pointed out by the proponent of the proposal, there is no need to allow for review conferences to be convened at short notice (unlike amendment conferences, for which there might potentially be some urgency).

EXPLANATORY NOTES

AMENDMENTS

The main outstanding issue in this article was the need to decide which provisions of the Protocol were to be subject to the simplified amendment procedure (see paras 7 and 8 of our draft Article). We have determined that only select provisions relating to the International Monitoring System and Associated Measures (as listed in para 7 of our draft Article) should be subject to the simplified procedure. However, given that this issue has not yet been discussed in any detail in the NTB AHC working groups, we would expect further consideration, particularly by the verification experts.

The only other outstanding issue in this article concerns the level of support required for the convening of an amendment conference. The two bracketed options for this are ''one-third or more'' and ''a majority'' (see para 3, page 40, CD/1364). All delegations except one have supported the deletion of the bracketed reference to ''a majority'', in favour of retaining ''one-third or more''.

The delegation supporting the retention of "a majority" argues that the number required to convene an amendment conference should be the same as that required to adopt an amendment (for which ''a majority'' has already been agreed - see para 5, page 40, CD/1364). It has been pointed out by several delegations, however, that the consideration of an amendment proposal is different from its adoption, and that the threshold for the convening of an amendment conference - which provides an opportunity for consideration/clarification of a proposal - should logically be lower than that for the more definitive process of adopting an amendment proposal.

On the basis of the greater degree of support for ''one-third or more'', we have removed the brackets around these words and deleted the bracketed text ''a majority''.

EXPLANATORY NOTES

DURATION AND WITHDRAWAL

**** N.B. Paragraph, sentence and line numbers refer to CD/1364 ****

PARA 1

We have deleted the bracketed phrase "such as another State Party violating provisions essential to the object and purpose of the Treaty, or has acted in violation of the spirit of this Treaty". This proposal has attracted no support. No delegation appears to support the view that a violation of the Treaty by one State Party should automatically give every other State Party the right to withdraw. Moreover, it is neither feasible nor helpful to attempt to list examples of what might constitute an extraordinary event.

Similarly we have deleted the last sentence of para 1: "A nuclear test by a State Party or non-State Party may be sufficient reason for withdrawal". This sentence was proposed by one delegation and has received no support. A nuclear test by one State should not automatically give every State Party the right to withdraw. Only a State Party which decided that such a test had jeopardised its supreme interests could have grounds for withdrawal.

PARA 2

The only outstanding issue concerns the period of advance notification for withdrawal. Each of the three options (three months, six months, and twelve months) has been supported by a few delegations. Several have said they could accept either six or twelve, noting that a period longer than three months is desirable in order to allow time for negotiation to prevent the withdrawal occurring.

In view of these positions, we assess that six months is the best compromise.

PARA 3

Our proposed wording differs from that contained in the Rolling Text only by its closer adherence to the example provided by Article XVI.3 of the Chemical Weapons Convention, and by its singling out of one named earlier treaty. We see value in making this explicit reference to the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water ("PTBT" or "Limited Test Ban Treaty"). In the absence of such a clear indication that those PTBT parties which accede to the CTBT intend the PTBT to remain in force, the PTBT would be in danger of implied termination in the event that all 120-odd PTBT parties acceded to the CTBT - by operation of Article 59 of the Vienna Convention of the Law of Treaties. Should it be so terminated, the PTBT would no longer form part of the pool of international obligations binding any PTBT party which chose to withdraw from the CTBT. The effect of making specific reference to the PTBT in paragraph 3 is thus to ensure the continuation in force of the PTBT.

EXPLANATORY NOTES

STATUS OF THE PROTOCOL

We have the made the necessary minor editorial amendments to this draft article to align it with the structure of our model treaty.

EXPLANATORY NOTES

SIGNATURE

Our model text is identical to the unbracketed article contained in the Rolling Text (CD/1364).

EXPLANATORY NOTES

RATIFICATION

Our model text is identical to the unbracketed article contained in the Rolling Text (CD/1364).

EXPLANATORY NOTES

ACCESSION

Our model text is identical to the unbracketed article contained in the Rolling Text (CD/1364).

EXPLANATORY NOTES

ENTRY INTO FORCE

The Rolling Text contains a series of options for entry into force (EIF) of the Treaty, ranging from the very simple to the complex. The range of options can be summarised into six main types:

1. simple numerical, whereby EIF is automatic once a set number of ratifications has been lodged;

2. fixed number including a specific list, whereby EIF occurs once a set number of ratifications has been lodged, including by all States on a specified list;

3. percentage of a specified list, whereby EIF occurs once the number of ratifications lodged equals a particular percentage of a specified list;

4. all of a specified list, whereby EIF occurs once each and every State on a specified list has lodged an instrument of ratification;

5. waiver proposal incorporating a simple numerical formula, whereby EIF occurs automatically for all States which waive the specified conditions, once a set number of ratifications with waivers has been lodged. (N.B. for States which choose not to exercise the waiver, EIF does not occur until all specified conditions - e.g. a list of requisite ratifications - have been met);

6. waiver conference proposal, whereby provision is made for the convening of a conference at which specified EIF requirements could be waived, provided all nuclear weapon states have already lodged instruments of ratification, and provided all nuclear weapon states plus a majority of other States which have ratified the Treaty so agree.

Our assessment is that none of the options in its current form is capable of meeting all the major concerns of negotiating parties. These concerns appear to be:

- that all "key" States ratify the Treaty before EIF ("key" States being defined variously as all Nuclear Weapon States, all States with nuclear industries, all CD Members and observer or applicant States);

- that EIF not be blocked by a delay in ratification by any individual State (the "hostage" problem);

- that the number and composition of States Parties at EIF be adequate to enable effective financing of the CTBT Organisation;

- that the number and composition of States Parties at EIF be adequate to enable effective implementation of the IMS (this involves, in particular, States which will host IMS facilities).

A chart summarising the types of EIF formulae contained in the Rolling Text draft Article as well as a new Australian proposal (see below), together with a summary of the extent to which each type meets the concerns outlined above, is attached.

As can be seen from the attached chart, the type of formula which appears to offer the greatest potential to meet the concerns of all negotiating parties is the waiver conference proposal. The particular waiver conference proposal currently contained in the Rolling Text (para 3) is not, however, capable of meeting all major concerns, since it incorporates a veto power for certain States, thereby raising the possibility of EIF being blocked by an individual state. We have therefore drafted an alternative waiver conference proposal.

Alternative waiver conference proposal

The first paragraph of our draft article establishes the basic requirement for EIF of the Treaty, namely ratification by all States Members of the Conference on Disarmament and all States observers to the 1996 CD Session. This requirement seems appropriate in view of the fact that this list comprises all States directly interested in the negotiation of the CTBT, without prejudice to the question of whether or not a State is a CD member, or has applied for CD membership.

The second paragraph of our draft article makes provision for a waiver conference to be held in the event that the requirement set out in the first paragraph is not fulfilled two years after the opening for signature of the Treaty. All States which had ratified the Treaty by that date would be eligible to attend the waiver conference. The waiver conference would examine the extent to which the EIF requirement had been met, and decide whether or not it would be feasible at that time for the Treaty to enter into force without this requirement having been completely met. This decision would be made by a two-thirds majority of all States present and voting, with no veto power for any State.

This formula has the following advantages:

- It contains a comprehensive list of countries whose ratifications would be required for EIF of the Treaty covering, in a non-discriminatory manner, all States which have a direct interest in the CTBT negotiations. In our assessment this list covers all countries which could, under various interpretations, be deemed to be "key States", and also covers a sufficient (if not optimal) number and range of States to enable effective financing and implementation/operation of the Treaty at EIF.* By using this comprehensive, existing list, we avoid the problem of explicitly identifying "key" States, which would be a difficult if not impossible task due to the subjectivity of the word "key".

- The waiver conference would provide a formal opportunity for States which had ratified the Treaty to examine the extent to which the requirement set out in paragraph 1 had been met, to identify "gaps" in the ratification process, to assess the extent to

---

*_List of CD member States and observers to the 1996 Session (current at 23 January 1996) is attached._

which such gaps might impede the effective implementation and functioning of the Treaty, and, if deemed appropriate, to waive any remaining requirement.

- By allowing States which have ratified the Treaty, in effect, to reassess the EIF requirement, it minimises the risk of undue or artificial delay in EIF of the Treaty. Moreover, the decision-making process for the waiver conference denies any individual State the opportunity to exercise a veto to block EIF of the Treaty.

We would note that, in the absence of any option which avoids the "hostage" problem and which attracts broad support, Australia's preference remains, as has been the case from the start of the negotiations, for the simple numerical formula (as was used in the Chemical Weapons Convention). If the simple numerical formula were to be employed, we would propose pitching it at a sufficiently high number (say between 80 and 90) to maximise the possibility of capturing all "key" States.

CTBT - ENTRY INTO FORCE

Concern / Proposal	Ensures all "key" States are on board at EIF	Ensures EIF cannot be held up by any State individually ("hostage" problem)	Ensures sufficient number/ composition of States Parties for effective financing of the CTBTO at EIF	Ensures sufficient number/ composition of States Parties for effective implementation of IMS at EIF
Simple numerical	No, but the higher the number, the greater the probability of capturing all "key" States	Yes	No, but the higher the number, the greater the probability of capturing all "key" States	No, but the higher the number, the greater the probability of capturing all "key" States
Fixed number including specified list	Yes	No	Yes, depending on content of list	Yes, depending on content of list
Percentage of specified list	No, but would come close if high percentage specified	Yes (although a small group of States on the list could conceivably hold up EIF)	Probably, depending on content of list	Probably, depending on content of list
All of a specified list	Yes	No	Probably, depending on content of list	Probably, depending on content of list
Waiver proposal with automatic EIF for "waiving" States once requisite number reached	No for "waiving" States Yes for non-"waiving" States	Yes for "waiving" States No for non-"waiving" States	No for "waiving" States Probably yes for non-"waiving" States	No for "waiving" States Probably yes for non-"waiving" States
Waiver conference with NWS veto power	Yes, unless the conference, including all NWS, decides otherwise	No	Yes, unless the conference, including all NWS, decides otherwise	Yes, unless the conference, including all NWS, decides otherwise

Waiver conference with no veto powers (New Australian proposal)	Yes, unless the conference decides otherwise	Yes	Yes, unless the conference decides otherwise	Yes, unless the conference decides otherwise

CD member States and States which have applied for CD membership (27 December 1995)*	CD member States and observers to the 1996 CD Session (23 January 1996)*
Algeria	**Algeria**
Argentina	**Argentina**
Australia	**Australia**
Austria	Austria
Bangladesh	Bangladesh
Belarus	Belarus
Belgium	**Belgium**
Brazil	**Brazil**
Bulgaria	**Bulgaria**
Cameroon	Cameroon
Canada	**Canada**
Chile	Chile
China	**China**
Colombia	Colombia
Costa Rica	
Croatia	Croatia
Cuba	**Cuba**
	Cyprus
Czech Republic	Czech Republic
Denmark	Denmark
Ecuador	Ecuador
Egypt	**Egypt**
Ethiopia	**Ethiopia**
Finland	Finland
France	**France**
	Gabon
Germany	**Germany**
	Ghana
Greece	Greece
	Holy See
Hungary	**Hungary**
	Iceland
India	**India**
Indonesia	**Indonesia**
Iran. Islamic Republic of	**Iran. Islamic Republic of**
Iraq	Iraq
Ireland	Ireland
Israel	Israel
Italy	**Italy**
Japan	**Japan**
	Jordan
Kenya	**Kenya**

CD member States and States which have applied for CD Membership (continued)*	CD member States and observers to the 1996 CD Session (continued)*
Malaysia	Madagascar Malaysia
Mexico	Malta **Mexico**
Mongolia	**Mongolia**
Morocco	**Morocco**
Myanmar	**Myanmar**
Netherlands	**Netherlands**
New Zealand	New Zealand
Nigeria	Nicaragua **Nigeria**
Norway	Norway
Pakistan	Oman **Pakistan**
Peru	Philippines
Poland	**Poland**
Portugal	Portugal
Romania	Qatar **Romania**
Russian Federation	**Russian Federation**
Senegal	Senegal
Slovak Republic	Slovak Republic
Slovenia	Slovenia
South Africa	South Africa
Spain	Spain
Sri Lanka	**Sri Lanka**
Sweden	**Sweden**
Switzerland	Switzerland
Syrian Arab Republic	Syrian Arab Republic
The Former Yugloslav Rep. of Macedonia	Thailand The former Yugoslav Rep. of Macedonia
Tunisia	Tunisia
Turkey	Turkey
Ukraine	Ukraine
United Kingdom	United Arab Emirates **United Kingdom**
United States of America	United Republic of Tanzania **United States of America**
Venezuela	**Venezuela**
Viet Nam	Viet Nam
(Fed. Rep. of Yugoslavia)	(Fed. Rep. of Yugoslavia)
Zaire	**Zaire**

EXPLANATORY NOTES

RESERVATIONS

We have deleted the brackets around this article. Only one delegation supports retention of the brackets, arguing that "all options" should be kept open until the main provisions of the Treaty are finalised. Our assessment is that the current draft represents the option most likely to gain consensus.

EXPLANATORY NOTES

DEPOSITARY

Our draft text is identical to the unbracketed article contained in the Rolling Text (CD/1364).

EXPLANATORY NOTES

AUTHENTIC TEXTS

Our model text is identical to the unbracketed article contained in the Rolling Text (CD/1364).

EXPLANATORY NOTES

PEACEFUL USE OF NUCLEAR ENERGY

We have deleted this article. Several delegations have opposed its inclusion on the grounds that it goes beyond the scope of the mandate for the negotiation of this Treaty.

The main substantive argument against the article is its redundancy. There already exists a body of international law governing peaceful uses of nuclear energy, namely the NPT, the IAEA statute and safeguards agreements, nuclear weapon free zone treaties, the Convention on the Physical Protection of Nuclear Material, the Nuclear Safety Convention, and so on.

A further problem with the proposal is that it draws only selectively on Article IV of the NPT, resulting in an unbalanced provision. Notably, the proposal omits the NPT's stipulation that the peaceful use of nuclear energy must be in accordance with Articles I and II of the NPT (articles which establish that Treaty's non-proliferation obligations).

It would be impossible, however, to achieve the requisite balance in this proposal without referring explicitly to the NPT, or reproducing substantial parts of that Treaty without attribution. This would be unlikely to attract consensus support.

It should be noted that there is nothing in the CTBT which could give rise to the misconception that the Treaty is intended to impinge upon peaceful uses, hence no need to include an explicit assurance to this effect.

In light of the above, we have deleted this article.

EXPLANATORY NOTES

PEACEFUL NUCLEAR EXPLOSION

We have deleted this article. It was proposed by one delegation and has received no support. It has been firmly opposed by many delegations. The recurrent arguments against the proposal are that it is impossible to distinguish between so-called PNEs and military tests, and that there are no known benefits deriving from PNEs which do not outweigh the political, economic and environmental costs of such explosions. These arguments were reinforced at the NPT Review and Extension Conference.

Our assessment therefore is that the proposal stands no chance of commanding consensus.

EXPLANATORY NOTES

SECURITY ASSURANCES FOR STATES PARTIES

We have deleted this article. The article was proposed by one delegation and has received no support. It has been strongly opposed by many delegations, on the grounds that is well beyond the scope of the Treaty and the mandate for its negotiation.

EXPLANATORY NOTES

RELATION TO OTHER INTERNATIONAL AGREEMENTS

We have deleted this article. It was proposed by one delegation and has received no support.

In the absence of foreseeable conflict arising between the CTBT and earlier multilateral treaties, we see no advantage in including a specific CTBT priorities provision. Even if any potential inconsistency between the CTBT and an earlier treaty or treaties were identified in advance, the implications of such inconsistency would require careful analysis rather than an automatic acceptance that the earlier treaty should prevail.

The possibility of some inconsistency between the CTBT and earlier (or, for that matter, later) treaties probably cannot be eliminated in advance. If some inconsistency were to emerge, however, the regime set out in the Vienna Convention on the Law of Treaties on the application of successive treaties on the same subject-matter would be adequate. While not always simple and straightforward, the Vienna Convention regime is known and well-accepted.

It is significant that, to date, no delegation has instanced any potential inconsistency which would usefully be remedied by a CTBT priorities provision subjecting the CTBT to earlier treaties.

EXPLANATORY NOTES

SECTION I: INTERNATIONAL MONITORING SYSTEM

GENERAL PROVISIONS

PARAS 1 - 5

Paragraph 1 This is the key provision in the Treaty defining the technical components of the IMS. We have deleted the bracketed references to satellite and EMP monitoring forming part of the agreed IMS, on the grounds that there is no possibility of consensus for such an inclusion, cost being a major consideration.

We have included four monitoring technologies in our outline of the International Monitoring System, but we have made provision for the utilization whenever appropriate of any other technology under the new section "Associated Measures and the International Exchange of Other Relevant Information."

Paragraph 2 is agreed language, streamlined to reflect our decision to maintain para 1 in its Protocol placement, rather than in the treaty language on verification.

In Paragraphs 3 and 4, we have deleted the internal brackets, considering that all the proposed language is relevant and acceptable to delegations.

Paragraph 5 is in accordance with our thinking on paragraph 27 of the head Treaty provisions.

PART 1: SEISMOLOGICAL MONITORING

PARAS 6 - 8

These paragraphs reproduce language agreed provisionally in the International Monitoring System Drafting Group. We have deleted the footnote attached to paragraph 8, which will fall away consequent on two particular issues reflected in the tables of seismic monitoring stations (see below). We have also de-bracketed the references to the numbers of primary and auxiliary network stations (50 and 119, in paras 7 and 8 respectively), reflecting the consensus technical recommendations of the IMS Experts Group (contained, in the case of the auxiliary network numbers, in CD/NTB/WP.283).

Table 1-A

This reproduces the table of primary network seismic stations as agreed by experts and endorsed on a preliminary basis by the Ad Hoc Committee late in the Conference's 1995 session. We have de-bracketed the content of the table, without prejudice to the final availability of the proposed stations to the CTBTO. We envisage that formal agreement to make a station available would follow consultations between the relevant state and the Preparatory Commission and then the CTBTO, and the finalisation of acceptable

arrangements for funding and operation of the station concerned. Details remain to be inserted for stations 26 (Niger) and 38 (Saudi Arabia).

We have removed the brackets around the table headings, placed by one delegation. There is majority agreement that monitoring facilities should be listed in tables annexed to the Protocol, in order to give the required levels of financial and technical predictability to the verification mechanism, and a reasonable political assurance as to its medium-term configuration. We consider there is no viable alternative to such an approach, since many potential States Parties will not be in a position to accede to a treaty the verification effectiveness of which is unclear and its costs undefined.

We have removed the brackets from stations 12, 18, 34, and 48 and the associated footnote, preferring to abide by the consensus technical recommendations of experts rather than amend this to provide enhanced coverage of test sites, at some cost to the overall effectiveness of the global network. If enhanced test site monitoring is sought by some States Parties, this could be met by the State Party hosting the test site concerned following the proposed provisions for co-operating national facilities.

Table 1-B

We have removed the brackets around the table contents and table heading on the same basis as for Table 1-A. Location and station type data need to be inserted for station 119 (Bulawayo, Zimbabwe). The more pressing problem is to resolve the problem caused by the deletion of three auxiliary seismic stations from the listing. In order to gain appropriate azimuthal coverage of the Indian Sub-Continent, our technical advice is that additional auxiliary stations will be needed in the area. If appropriate stations are not offered after further reflection, there will be a requirement to examine other options, using seismic stations which might be available in other states on the Sub-Continent.

PART 2: RADIONUCLIDE MONITORING

PARAS 9 - 11

These paragraphs reflect language in the Rolling Text currently subject to review in the IMS Drafting Group.

In para 10 we have sought to accurately reflect the technical consensus reached, and recorded in CD/NTB/WP.283 for a global radionuclide monitoring network of 80 stations, consisting of 75 stations plus 5 stations located at certified laboratories, the entire network of stations being supported by certified laboratories . In line with emerging convergence on these questions in the Conference, we have chosen to reflect the stations in one table (2-A) and the certified laboratories in another table (2-B).

There is relatively strong support in the Conference from a large number of delegations for the inclusion of noble gas monitoring capability in the network, including a number of countries stressing the benefits of this capability being deployed throughout the network. Some other delegations, while not denying the value of the technique, are inclined to question whether inclusion would be cost-effective. One delegation opposes inclusion of noble gas

monitoring. On balance, we believe inclusion of noble gas monitoring desirable and cost-effective. We have drafted a compromise position whereby the radionuclide monitoring element of the IMS would initially start operations with 25% of the global network stations equipped for noble gas monitoring. The Protocol would also establish a requirement for the States Parties, one year after entry into force of the Treaty, to develop and consider a strategy for the implementation throughout the network of noble gas monitoring.

Paragraph 11 deals with laboratories which will operate in support of the radionuclide monitoring element of the IMS. There is an expectation that all laboratories handling sample analysis and processing tasks on behalf of the Organization will need to be certified in some manner by the Technical Secretariat. It is clearly understood that certified laboratories would be drawn from existing laboratories, and perform sample analysis and other tasks under contractual or other fee-for-service arrangements with the Technical Secretariat. No other CTBTO funding would be forthcoming for the establishment or operation of the laboratories, and for this reasons Table 2-B is not referred to in the IMS funding provisions in the Head Treaty. We take the view that the Technical Secretariat should have maximum operational and commercial flexibility in determining what certified facilities it uses for sample analysis.

We have chosen to specify a number of certified laboratories at the higher end of the spectrum recommended in WP.283, realising the likelihood of further clarification of this, and of the actual facilities likely to be available on a global basis, once the Friend of the Chair for Technical Verification has an opportunity to report further on the point.

We have chosen to delete the bracketed Rolling Text paragraph (paragraph 14, CD/1364, page 95) suggesting the use of airborne laboratories as part of the IMS. This proposal, made by one delegation, has not secured any wider support in the Conference, and does not appear to be capable of achieving consensus.

Table 2-A

We have de-bracketed the table heading and contents, as for Tables 1-A and 1-B. We have de-bracketted four stations in the table, and have deleted the associated footnote suggesting their substitution with four stations located on the active NWS nuclear testing sites. As for the primary seismic network, we would envisage any special treatment of test sites being achievable through the State Party hosting a given test site declaring a nearby existing radionuclide monitoring facility a "co-operating national facility".

Other than for agreed revisions (incorporation of revised detail of Russian station number 55, Indian station number 34, and Japanese station number 37), this table remains as given in the IMS Expert Group report (CD/NTB/WP.283). Location details for the monitoring capability ("type" column) for all stations remain to be inserted.

Table 2-B

While in our view it might not be strictly necessary to list the certified laboratories in their own Table annexed to the Protocol, we have reflected here the growing convergence that this

step would be useful. We have also included the proposal for an additional certified laboratory, made by India, and inserted information provided by Japan as agreed.

PART 3: HYDROACOUSTIC MONITORING

PARAS 12 - 13

These paragraphs directly reproduce the language of Part 3 of the IMS Protocol within the Rolling Text, with only minor editorial adjustments.

In paragraph 12, we have deleted the bracketed clause in the first sentence. We understand the concern lying behind this drafting, but note the assurance of the experts that the technical capabilities of the hydroacoustic sensors to be deployed do not allow for the collection of any meaningful information on military submarine activities. Furthermore, the requirement for the IMS to concentrate on the collection of data relevant to nuclear testing and not other activities is adequately guarded in provisions such as para 2 of the treaty language on verification. We have inserted into the paragraph's final sentence the thought that data may flow directly from the station to the IDC, or pass through a national data centre. It is the understanding of negotiators that the channelling of data indirectly to the IDC would not affect the obligation of any State Party to ensure that data from the primary station is being made available continuously, without interruption, and in real time.

In paragraph 13 we have removed the brackets around the only technical option remaining in the text (6 hydrophone and 5 T-phase stations).

Table 3

As for other tables, we have removed the brackets from the heading and content of Table 3, which reflects the consensus view of experts.

PART 4: INFRASOUND MONITORING

PARAS 14 - 15

As for paragraphs 12 and 13, these paragraphs reproduce the language of Part 4 of the IMS Protocol within the Rolling Text, with only minor editorial adjustments.

In paragraph 14, we have added the reference to the State Party being able to select either direct or indirect communications mode. In para 15, we have removed the brackets from around the single technical option remaining, the 60 stations recommended by the IMS Experts Group and recorded in Table 4.

Table 4

As for other tables, we have removed the brackets from the heading and content of Table 4, which directly reflects the consensus view of experts.

PART 5: PROCESSING AND ANALYSIS OF, REPORTING ON, AND ACCESS TO INTERNATIONAL MONITORING SYSTEM DATA

PARAS 16 - 20

We have chosen to bring together in this new Part 5 of the Protocol (essentially a re-vamped Part 7) all material dealing with Technical Secretariat processing of IMS data previously appearing in the individual Protocol parts dealing with particular technologies (eg. para 9 of IMS Protocol Part 1 and para 15 of IMS Protocol Part 2, CD/1364 p 91 and 95 respectively).

Our approach is founded on the assessment that we should as negotiators be economical in the amount of technical detail we include in the Treaty and Protocol. For example, we do not believe it would be appropriate to spell out in an international legal arrangement of this sort the detailed criteria for processing of, and giving States Parties access to, IMS data. It should suffice to include a general and descriptive framework which can be elaborated on an operational level in the relevant Operational Manuals (and thereby be adjusted more readily to the demands of the age). We should not need to negotiate at painful length the flow-chart of the Technical Secretariat's processing operations or the algorithmic approach which might be adopted in any particular element thereof.

Instead, we consider States Parties will need to be assured as to the broad parameters within which Technical Secretariat processing operations will proceed, and to be clear on the various types of access to data and data products which will be offered.

In view of the early stage reached in the consultations held by the Friend of the Chair for the Technical Aspects of the IDC, much of the language in the paragraphs of this Part of the Protocol is new. It does however draw heavily on material describing the technical processes being envisaged for implementation at the CTBTO IDC, and on procedures being developed in the current experimental IDC for giving States Parties a range of data access options.

Paragraph 16 is a slightly elaborated version of the first sentence of paras 9 and 15 of the IMS Protocol.

Paragraph 17 picks up the next thought from paras 9 and 15 of the IMS Protocol, but injects the notion contained in the FOC IDC's 15 January paper that IDC manipulation of IMS data should benefit (as it does at present) from both automated and interactive processing according to agreed procedures, such procedures including co-processing of data from different monitoring networks in order to create a powerful synergy in the verification capability of the IMS. The technical processes described in the second sentence describe analytical procedures as applied at present in the experimental IDC, with the addition of the thought (in line with para 12 (d) of the treaty language on verification) that the technical objective of such processing is to produce a characterisation data product. Such a product would sit between the two extremes of circulation of semi-processed data on the one hand, and circulation of what would effectively be Technical Secretariat compliance judgements on the other.

Paragraph 18 reflects the current range of data access options being developed in the experimental IDC, with the understanding that these would be cost-free to the State Party

requesting access. This is underscored by the cross-reference in para 25 of the treaty language on verification, relating to CTBTO funding of IMS operations.

Paragraph 19 establishes the principle of regular reporting bulletins, both for individual technologies and for the fusion of data from two or more monitoring technologies (see FOC IDC's 15 January paper). We do not consider it would be helpful to be more specific in the treaty-level language on precisely which data-stream is to be fused with which other stream, nor in what processing order. It is conceivable that over the years, ideas on the most effective use of the synergy principle will change.

We believe the concept of regular IDC reporting bulletins (the receipt of which in no way prejudices the States Parties' right to access other data products such as raw data segments or parameter information, or to have the reporting bulletin presented in a customised format with a greater or lesser amount of primary information displayed) enjoys consensus, as does the concept of data fusion.

PART 6: AUTHENTICATION OF INTERNATIONAL MONITORING SYSTEM DATA AND DATA SECURITY

PARAS 21 - 22

We have streamlined the five paragraphs currently contained in the current IMS Protocol Part 10 without losing any of the key elements. We have deleted the brackets, in accordance with the broad support in the Conference for the concept that States Parties should make efforts and cooperate to ensure that IMS data is authenticated and reasonably secure from any tampering.

Paragraph 22 seeks to incorporate compactly into its first sentence the current rather extended reference (in para 38 of the original Part 10 language) to the need for the standard verification agreements to be concluded between States Parties and the Organization to cover data authentication concerns. The combined effect of paras 12 (l) and 13 of the treaty language on verification, together with this paragraph, appears to make the content of para 39 of the original Part 10 language redundant (page 100 of CD/1364).

SECTION II: ON-SITE INSPECTIONS

The structure of the OSI section of the Protocol reflects as closely as possible that of CD/1364 with some minor changes to sub-headings and changes in the order of paragraphs to ensure a logical arrangement. In a number of cases paragraphs in CD/1364 have not been reproduced because the relevant provisions are already set out in Article V.

Part 1: General Rules and Procedures (paras 23-24)
Part 2: Standing Arrangements
- Designation of Inspectors and Inspection Assistants (paras 25-33)
- Privileges and Immunities (paras 34-39)
- Points of Entry (paras 40-42)
- Arrangements for Use of Non-Scheduled Aircraft (paras 43-47)
- Approved Inspection Equipment (paras 48-52)

Part 3: Request for and Notification of an On-Site Inspection
- Inspection Requests (paras 53-55)
- Notifications (paras 56-57)

Part 4: Pre-Inspection Activities
- Preparations (paras 58-59)
- Entry into the Territory of the Inspected State Party and Transfer to the Inspection Area (paras 60-61)
- Administrative Arrangements (paras 62-63)
- Pre-inspection Briefing and Inspection Plan (paras 64-65)
- Verification of Location (para 66)

Part 5: Conduct of Inspections
- General Rules (paras 67-75)
- Communications (para 76)
- On-Site Verification Activities (para 77)
- Access Regime (paras 78-80)
- Managed Access (paras 81-89)
- Overflights (paras 90-97)
- Conduct of Inspections in Areas not under the Jurisdiction or Control of any State (paras 98-102)
- Collection, Handling and Analysis of Samples (paras 103-109)
- Observers (paras 110-114)
- Post-Inspection Briefing (para 115)
- Departure (para 116)
- Reports (paras 117-119)

PART 1: GENERAL RULES AND PROCEDURES

PARAS 23-24

These paragraphs are based on paras 40 and 44, page 101 of CD/1364. In paragraph 23 we have removed the square brackets from the words "rules and" in the first sentence of para 40 and have reformulated the second sentence to clearly define the status of the Operational Manual for On-Site Inspections. We have deleted the word "international" which is not used

in the Verification Article of CD/1364 and appears unnecessary here. Paragraph 24 is a slightly reworked version of para 44 of CD/1364.

PART 2: STANDING ARRANGEMENTS

Note: Except where otherwise appropriate, bracketed references to the "Organization" in this Part have been deleted in favour of the alternative of "Technical Secretariat".

PARAS 25-33 (Designation of Inspectors and Inspection Assistants)

These paragraphs substantially reproduce paras 46, 50, 51, 52, 54, 55, 56, 57 and 58, pages 102-104 of CD/1364. We have unbracketed references to "inspection assistants" and have included a definition of their role adapted from that in the Chemical Weapons Convention. Paras 47 and 48 of CD/1364 have been deleted in favour of the simplified formulation of paragraph 28. We have not used the phrase "professional duties" in defining the role of inspectors and inspection assistants as this would be likely to introduce unnecessary definitional issues. Nor have we adopted the proposal contained in paras 48 and 53 of CD/1364 that States Parties should propose persons for inclusion on the list of inspectors and inspection assistants as this would run counter to the principle that inspectors and inspection assistants should be seen to carry out their duties independently and not as representatives of any particular State Party. Para 58, page 104 of CD/1364 (derived from the CWC) has been reformulated to take into account the difference between inspections of "facilities" in the context of the CWC and the inspection under the CTBT of "areas" under which may contain "facilities".

PARAS 34-39 (Privileges and Immunities)

These paragraphs reproduce paras 61 to 66, pages 104-106 of CD/1364 with references to the "Organization" deleted in favour of the "Technical Secretariat".

PARAS 40-42 (Points of Entry)

With minor amendments these paragraphs reproduce paras 67 to 69, page 106 of CD/1364. The time-frame of 12 hours sets a minimum time for the inspection team to travel from the point of entry to an inspection area. Paragraph 52 of Article V provides for the inspection team to reach the inspection area not later than 24 hours after arrival at the point of entry.

PARAS 43-47 (Arrangements for Use of Non-Scheduled Aircraft)

With minor amendments these paragraphs reproduce paras 70 to 74, pages 106-107 of CD/1364. We have deleted references to the "Organization" in favour of the "Technical Secretariat". In paragraph 43, we have deleted the bracketed words "For inspections where" in favour of the alternative "For conducting inspections as well as in cases where" to allow for the possibility that non-scheduled aircraft may be used to conduct overflights of the inspection area in accordance with paragraphs 90-97 of the Protocol. We have also replaced the phrase "aircraft owned or chartered by the Technical Secretariat" with references simply to "non-scheduled aircraft" and "aircraft".

PARAS 48-52 (Approved Inspection Equipment)

These paragraphs substantially reproduce paras 78 to 81, pages 108 of CD/1364. In paragraph 48, we have deleted the second last sentence of para 78 of CD/1364 which is more relevant to the context of inspections of facilities under the CWC. We have added an additional sentence to incorporate the useful idea contained in para 136, page 122 of CD/1364 that States Parties may submit proposals for equipment for conducting inspections. (Paras 136 to 139, pages 122 of CD/1364 have been deleted.) In paragraph 49, we have added the words "as required" after "calibrated" as it is not clear that all the equipment which might be used in an inspection necessarily requires "calibration". Paragraph 50 (new language) provides for the possible use of equipment made available by a State Party for a specific on-site inspection subject to the approval of the Technical Secretariat in accordance with paragraph 49. In paragraph 51, we have chosen the alternative "check that the equipment is in conformity with the standard approved equipment". We have slightly reformulated the third sentence in para 80, page 108 of CD/1364 and removed the bracketed phrase "not meeting the description or" from the penultimate sentence. These changes reflect the view that the activity envisaged here would not be an intensive "inspection" of equipment (which could take a long time and possibly lead to loss of confidence in the operational status or calibration of equipment). Rather the procedure would involve checking that each piece of equipment imported by the inspection team was appropriately designated as equipment approved for the relevant phase of the inspection.

PART 3: REQUEST FOR AND NOTIFICATION OF AN ON-SITE INSPECTION

PARAS 53-55 (Inspection Requests)

These paragraphs set out the requirements for a request by a State Party for an on-site inspection. Paras 82 to 85, pages 109-111 of CD/1364 contain proposals for varying degrees of specificity for inspection requests. In drafting paragraph 53, we have sought to strike a balance between ensuring that any request for an on-site inspection would be detailed and specific (thereby ruling out vague references to possible non-compliance) while at the same time taking a realistic view of the information that is likely to be available to States Parties from the IMS and other elements of the Treaty verification regime. Our formulation in paragraph 53 draws upon elements of paras 82-85 to provide what we judge to be clear and appropriate specifications including the phase of an OSI requested, the location etc of the inspection area, information concerning "the nature and circumstances of the possible nuclear weapon test explosion or other nuclear explosion carried out contrary to Article 1 of the Treaty" including at least the estimated time and location, and the probable environment. The requesting State Party would also be required to provide all appropriate information on which the request was based.

Paragraph 54 is based on para 90, page 113 of CD/1364 with the words "with a general indication" replaced by "indicating" which requires greater precision.

Paragraph 55 is based on para 88, page 113 of CD/1364. We consider that the figures of 1000 km^2 and 50km are appropriate and believe that they have broad support among delegations.

PARAS 56-57 (Notifications)

Broadly based on para 87, para 112 of CD/1364, this paragraph sets out the information to be included in notifications made by the Director-General to the inspected State Party pursuant to paragraph 51 of Article V. Inter alia we have deleted sub-para (a) of para 112 of CD/1364 which refers to an inspection request submitted by the Technical Secretariat or Organization and sub-para (j) which refers to the estimated date and duration of the inspection. Time-frames for the inspection are set by paragraph 56 of Article V. Subject to those time-frames, the duration of the inspection would depend on the particular circumstances encountered by the inspection team. An estimation of the duration of the inspection could be made at the time of notification to the inspected State Party, but a requirement to do so almost certainly before the completion of operational planning for the inspection would not appear to be necessarily useful. A more appropriate time for an estimate of the inspection duration to be conveyed to the inspected State Party could be the pre-inspection briefing, but the value of such an estimate would again depend upon the particular circumstances of the case. Paragraph 57 is based on para 91, page 113 of CD/1364. We consider the requirement for acknowledgement within 1 hour (as in the CWC) to be appropriate.

We have not incorporated the detailed specifications for the inspection mandate set out in para 86, pages 111-112 of CD/1364 as we consider the parameters of the mandate to be adequately defined by paragraph 54 of ArticleV.

PART 4: PRE-INSPECTION ACTIVITIES

PARAS 58-59 (Preparations)

Paragraph 58 is based on the first sentence of para 43, page 101 of CD/1364. Paragraph 59 is based on para 49, page 102 of CD/1364 (which is more appropriately located in this Part than Part 2) with the addition of references to inspection assistants as part of the inspection team and the deletion of the last sentence which proposed that the selection of the head of inspection team be subject to Executive Council approval.

PARAS 60-61 (Entry into the Territory of the Inspected State Party and Transfer to the Inspection Area)

Paragraph 60 is based on para 94, page 114 of CD/1364 as it was reworked in Working Group 1 in the January intersessional period. The time-frame of 24 hours is consistent with that set out in paragraph 52 of Article V. Paragraph 61 reproduces para 95, page 114 of CD/1364 with appropriate cross references to other paragraphs.

PARAS 62-63 (Administrative Arrangements)

Paragraph 62: Agreed text (para 75, page 107 of CD/1364)

Paragraph 63: Based on para 76, page 107 of CD/1364. We have made provision for the designation of more than one representative.

We have not included para 77, page 104 of Cd/1364 as it refers to abuse (an issue dealt with paragraph 68 of Article V.)

PARAS 64-65 (Pre-Inspection Briefing and Inspection Plan)

In view of the practical differences between the inspection of facilities under the CWC and the inspection of areas under the CTBT, we have taken the view that the pre-inspection briefing would be more appropriately held at the point of entry rather than the inspection area which could be in a remote area with limited communication and transportation infrastructure. Paragraph 64 is based on para 97, page 114 of CD/1364 with the words "inspection site" replaced by "point of entry" and the incorporation of a requirement for notification of any managed access areas designated in accordance with paragraphs 81 to 84. Paragraph 65 (new language) replaces para 98, page 114 of CD/1364 which proposes that the inspection team would prepare an initial inspection plan after the pre-inspection briefing. Consistent with the requirement to conduct the inspection without delay, the inspection team would arrive at the point of entry with an initial inspection plan which could be modified as appropriate following the briefing.

PARA 66 (Verification of Location)

This paragraph reproduces para 99, page 114 of CD/1364 with references to "site" changed to "area" and "location-finding" replaced by "position-finding", the latter being the term used elsewhere in the Protocol.

PART 5: CONDUCT OF INSPECTIONS

PARAS 67-75 (General Rules)

Paragraph 67 is based on the second sentence para 100, page 115 of CD/1364. (The bracketed first sentence of the para is redundant.) The second sentence (new language taken from para 39, Part II of the CWC Verification Annex) is in our view appropriate to establish the requirement that the inspection team should observe the mandate for the inspection issued by the Director-General.

Paragraph 68 reproduces the agreed text of para 108, page 117 of CD/1364.

Paragraph 69 is a slightly revised version of para 117, page 118 of CD/1364.

Paragraph 70 is based on para 118 , page 118 of CD/1364. We have deleted the bracketed references to sensitive sites and inspection phases to establish a general principle applicable throughout either phase of an inspection.

Paragraphs 71 and 72 reproduce the agreed language of paras 149, page 124, and para 110, page 117 of CD/1364, respectively.

Paragraph 73 is based on paragraph 107, page 116 of CD/1364. We have inserted the words "and inspection assistants" after "inspectors" and the words "as a rule" before the word "exceed". In our view the figure of 30 inspectors or inspection assistants is an appropriate

benchmark for the size of inspection teams, the use of the words "as a rule" providing flexibility to accommodate unusual circumstances.

Paragraph 74 reproduces the agreed language of para 145, page 124 of CD/1364.

Paragraph 75 is based on para 146, page 124 of CD/1364. We have deleted the bracketed words "at its request" which implies a right to receive copies on demand at any time during the inspection and the words "and samples", the latter issue being addressed under paragraph 105.

PARA 76 (Communications)

Paragraph 76 is based on para 135, page 122 of CD/1364. We have inter alia deleted the bracketed words "with the authorization of the inspected State Party". Such a condition would effectively subject the communications of the inspection team to the control of the inspected State Party and could be used to obstruct the carrying out of the inspection.

PARA 77 (On-Site Inspection Verification Activities)

Paragraph 77 draws upon elements from the range of proposals embodied in paras 102, 140, 141, and 142 (pages 115, 123-124 of CD/1364) to set out the range of activities which may be conducted by the inspection team in the inspection area. We have used the words "activities" rather than "technologies" or "equipment" in the sub-heading and the chapeau to make it clear that this paragraph defines the types of activities which may be conducted rather than the precise equipment or methodology to be employed. In our view, the former would be contained in the list of approved equipment and the latter set out as appropriate in the Operational Manual for On-Site Inspections. The verification activities to be carried out in a particular inspection would be listed in the mandate issued by the Director-General.

In determining the distribution of activities between the two inspection phases (short and extended), we have drawn on the Report of the Group of Experts on On-Site Inspection to Working Group 1 on Verification (CD/NTB/WP.198, 15 December 1994) and the various working papers and other documents on the subject of OSI verification activities and technologies circulated by delegations. The distribution of activities between the two inspection phases is consistent with the concepts of a short and relatively less intrusive phase designed to provide the basis for the rapid clarification of a compliance concern (including determination of the existence or otherwise of time-critical phenomena) and an extended phase of an OSI where relatively more intrusive and potentially costly activities would be required to determine the existence or otherwise of evidence of non-compliance. Thus, for example, measurement of radiation and collection of radionuclides in a short phase of an OSI could be carried out underground including in wells, shafts and mine workings, but the time-consuming and potentially expensive activity of drilling for radioactive samples would be restricted to an extended phase of an inspection. Similarly an inspection team could conduct passive seismological measurements and monitoring for aftershocks in a short phase of an OSI, but active seismic measurements would only be conducted during an extended phase. While consideration by delegations and experts may result in some refinement of the distribution of verification activities within a two phase OSI structure, we believe that paragraph 77 could serve as an effective basis for convergence in the negotiations.

PARAS 78-80 (Access Regime)

Access and managed access represent one of the most difficult aspects to be resolved in the development of an effective CTBT OSI regime. In developing provisions on access and managed access, we have sought to develop a package which explores the middle ground between the range of preferences expressed by delegations, and which strikes an appropriate balance between the particular verification requirements of the CTBT and the legitimate needs of States Parties to protect sensitive national security interests unrelated to the obligations of the Treaty and to ensure respect for constitutional protections of private persons and property.

Our starting point, and an integral part of our balanced OSI package, has been a clear presumption of access to the inspection area granted by the inspected State Party, subject only to well-defined exceptions under managed access provisions. Our view, and that of many other delegations, is that the over-riding principle of access is in no way inconsistent with the sovereign rights of States Parties. Any State Party would have committed itself, through its voluntary decision to ratify the CTBT, to comply with its provisions and to accept, subject to the provisions of the Treaty and Protocol, on-site inspections in its territory or any other place under its jurisdiction or control. In this context, the basic presumption must be for an inspected State Party as a country committed to the Treaty to allow access to demonstrate its compliance.

In the light of the broad approach outlined above, we have sought to avoid in paragraph 78 the definitional complications associated with the use of adjectives such as "full" or "unimpeded" contained in the heavily bracketed para 112, page 117 of CD/1364 in favour of the simplified formulation contained in para 112 (bis) which, making clear that the presumption of access is subject only to the exceptions and operational procedures set out under managed access, has attracted broad support from delegations. The first sentence of paragraph 78 is based on para 112 (bis) while the second sentence is new language designed to make it clear that question of overflights is specifically addressed by the overflights provisions of the Protocol. Paragraph 79 is a simplified version of para 114, page 117 of CD/1364 while paragraph 80 is based on para 115, page 118 of CD/1364 with the redundant reference to managed access at the beginning of the second sentence removed and that sentence combined with the first sentence.

PARAS 81-89 (Managed Access)

The managed access provisions of CD/1364 (para 77, page 85, and paras 125-131, pages 119-121) are under-developed and, as they stand, in our view provide an inadequate basis for the development of a managed access regime appropriate to the verification requirements of the CTBT. As a consequence, with the exception of paragraphs 85 and 86 which with some modifications are based on paras 126 and 127, page 120 of CD/1364 respectively, paragraphs 81 to 89 contain some new language. In these paragraphs we have sought to develop a managed access regime in which we have sought to develop a managed access regime which would both allow an inspection team to carry out its essential task of clarifying whether or not a nuclear explosion has been carried out contrary to Article 1 and permit an inspected State Party to manage access to the inspection area to protect national security and other interests unrelated to the issue of compliance. In this we have taken note that many

delegations have drawn on the precedents of the CWC in proposing managed access provisions for the CTBT, and the view expressed by a number of other delegations that the CTBT requires a distinct managed access regime which reflects the particular requirements of the Treaty (both in relation to the nature of the prohibited activity and the OSI process - in particular the inspection of "areas" rather than facilities"). The regime set out in paragraphs 81 to 89 in our view should provide a solid foundation for efforts to reach convergence on this key issue.

Paragraph 81 would establish the right of an inspected State Party to designate, for either phase of an inspection, locations or sites within the inspection area as "managed access areas". The inspection team would as a rule be notified of any designated managed access areas at the pre-inspection briefing (paragraph 82). There would be no limit on the number of managed access areas which could be designated, but each area would be limited to an area of 2.5 km^2 and the total area of managed access areas which could be designated in the course of an inspection would be subject to a limit of 5 per cent of the inspection area unless the total inspection area was less than 200 km^2, whereupon the total area of managed access areas would be limited to 10 km^2 (5 per cent of 200 km^2). The figure of 2.5km^2 for each managed access area and 5 per cent of the inspection area are smaller than the figures proposed by one delegation for the designation of what could be termed "exclusion" areas (10 km^2 and 10 per cent of the inspection area - see para 120, page 119 of CD/1364). In our judgment the areas proposed in para 120, page 119 of CD/1364 are too large and would allow an inspected State Party, if it wished, to limit access to the inspection area to a point where the collection of time-critical evidence of a nuclear explosion could be effectively prevented.

The limits defined in paragraph 83 which have been proposed by another delegation would in our view allow an inspected State Party ample scope to designate the necessary number of managed access areas. At the same time, however, we believe that even in a case where the management of access to a particular area amounted to the effective exclusion of the inspection team from that area, it would still be possible in a short phase of an OSI to determine by means of verification activities outside the area, the existence or otherwise of time-critical phenomena produced by an underground nuclear explosion (aftershocks and short-lived radionuclides). In this regard it should be noted that a circular managed access area of 2.5 km^2 would have a radius of approximately 892 meters.

The last sentence of paragraph 83 is designed to ensure that the separation of managed access areas is sufficient to prevent the de facto combination of managed access areas. The minimum distance of 50 meters reflects both an allowance for the practicalities of ground-based movement and verification activities, and the relationship between the managed access regime and the provisions of paragraphs 93 and 94 concerning overflights.

Paragraph 84 provides for the inspection team and the inspected State Party to reach agreement on which localities or sites would remain as designated access areas in the event that the total area of such areas exceeds the limits of paragraph 83. This provision should provide a incentive for an inspected State Party not to attempt to exceed the overall limits.

Managed access areas would not be exclusion zones. Pursuant to paragraph 85, the inspection team and the inspected State Party would as necessary negotiate the modalities of access within the inspection period to each managed access area including those aspects and

issues set out in sub-paragraphs (a) to (g) which are based with some modifications on sub-paras 126 (a) to (f), page 120 of CD/1364.

We have also addressed the question of access to sensitive installations and buildings - an issue raised by several delegations. Pursuant to paragraph 86 (based on para 127, page 120 of CD/1364), the inspected State Party would have the right during either phase of an OSI to take measures with regard to access by the inspection team to any sensitive installation or building to prevent the disclosure of confidential information and data not related to the Treaty. Paragraph 87 provides for a corresponding obligation on the part of the inspected State Party to make every reasonable effort to demonstrate that such an installation or building was not used for purposes related to possible non-compliance with Article 1 of the Treaty.

Under paragraph 88, the inspected State Party would also have the right during a short phase of an OSI to exempt from access the interior of any building within the inspection area. The inspected State Party would be obliged to make every reasonable effort to demonstrate that a nuclear explosion was not carried out within or below such a building. In an extended phase of an on-site inspection, access to buildings would be subject to the provisions of paragraph 86 and, if the building in question was located within a managed access area, the managed access provisions of paragraph 85. (One possible scenario in which access to a building could be sought by an inspection team would be where a building was located atop a shaft or at the mouth of a tunnel in which it was suspected that a nuclear explosion may have been conducted.)

Paragraph 89 would establish the right of the inspected State Party to exclude the observer of the requesting State Party from any designated managed access area, or from any sensitive installations or buildings within the inspection area.

PARAS 90-97 (Overflights)

Although there appears to be broad agreement in the Conference that overflights would be an important part of an effective CTBT OSI regime - particularly to narrow the area to be inspected and to optimise the conduct of ground-inspection activities - delegations have expressed a range of preferences relating to overflights, including a proposal that overflights only be conducted with the permission of the inspected State Party (para 143, page 124 of CD/1364), provision for prior notification and consultation (para 109, page 117 of CD/1364) and for overflights to be conducted by an advance party of the inspection team (para 153, page 125 of CD/1364). As in the case of managed access, the relevant provisions of CD/1364 do not in our view provide an adequate template for the development of an overflights regime appropriate to the verification requirements of the CTBT. As a consequence paragraphs 90 to 97 contain substantial elements of new language in which we have sought to again strike a balance between the preferences and concerns of delegations, and to develop a framework which meets the practical requirements of timely and effective inspections while allowing the inspected State Party to protect legitimate national security interests unrelated to the obligations of the CTBT.

Paragraph 90 would establish the right of the inspection team to conduct overflights of the inspection area to carry out a range of appropriate verification activities (consistent with the provisions of paragraph 77) "for the purpose of narrowing the area to be inspected and

optimising the conduct of ground-based inspection activities" (language taken from para 150, page 124 of CD/1364). Paragraph 91 provides for overflights to be carried out by aircraft, helicopters or remotely piloted aerial vehicles (otherwise known as unmanned aerial vehicles - UAVs). We have included reference to the latter as UAVs may in some circumstances be a cost-effective alternative to the use of manned aircraft. The use of UAVs may also provide a less intrusive alternative to manned overflights. (The use of UAV systems could make it easier to ensure that verification activities such as video/photographic imaging or measurements of radioactivity were only conducted outside certain areas.) Paragraph 68 also provides for overflight aircraft or aerial vehicles to be flown or operated by inspectors or inspection assistants, or other personnel subject to agreement between the inspection team and the inspected State Party. Paragraph 92 provides for the inspected State Party to check aircraft used for overflights to ensure that they are equipped in conformity with the approved equipment.

Broadly based on para 109, page 117 of CD/1364, paragraph 93 provides for notification and consultation prior to overflights. It also establishes a basic provision that overflights should avoid overflying designated managed access areas. Paragraph 94 provides for agreement on measures to ensure that verification activities would not be carried out when an overflight must of necessity transit over a managed access area. (In the absence of such a provision it is conceivable that an inspected State Party could designate managed access areas in such a way as to effectively preclude overflights over the entire inspection area - i.e. by designating a series of such areas around the perimeter of the inspection area.)

Paragraph 95 appropriately requires that, subject to safety considerations, overflights should adhere strictly to the flight plan and as a rule be conducted at low altitudes. Low altitude flights would be essential for carrying out verification activities including visual observation, video/photographic imaging and gamma-radiation measurement and at the same time would limit any unintended observation of areas beyond the inspection area. We have not defined "low altitude". An altitude range of between 100 to 400 meters above ground may be appropriate - but this would require expert consideration and too precise a specification may be undesirable. Paragraph 96 would establish the right of the inspected State Party to exclude the observer of the requesting State Party from any overflight. Paragraph 97 makes necessary provision for the basing of overflight aircraft and for agreement between the inspection team and the inspected State Party on flight paths between the basing area and the inspection area.

PARAS 98-102 (Conduct of Inspections in Areas not under the Jurisdiction or Control of any State)

In these paragraphs we have expanded on the provisions of paras 133 and 134, pages 121-122 of CD/1364 to make provision for States Parties to assist the conduct of inspections in areas not under the jurisdiction or control of any State (most obviously on or over the high seas). The costs of assistance by States Parties would be borne by the Organization.

We do not envisage such arrangements requiring the Organization to pay for holding aircraft or other expensive inspection assets on constant standby. Rather, judicious pre-positioning of certain equipment and standing arrangements negotiated with relevant States Parties

should permit rapid case-by-case access to available aircraft or other inspection facilities at short notice.

Provision is consequently made for the Director-General, subject to approval by the Executive Council, to negotiate standing arrangements with States Parties to facilitate such assistance.

A delegation has proposed that for reasons of timeliness and cost-effectiveness, OSI in areas beyond the jurisdiction or control of any State should be a "national responsibility" of States Parties rather than the Organization. This proposal has attracted criticism from a number of delegations on the grounds that it is impractical and incompatible with the concept of an internationally verifiable treaty. In our view the results of a national OSI would lack the independent authority and multilateral credibility of an inspection conducted by the Organization. Nor is it clear that such an arrangement would provide for a more rapid response given the inevitable requirement for ad hoc support arrangements and coordination of approach between States Parties. It would also impose an inequitable financial burden on littoral states (especially those with extensive coastlines). Our assessment is that such a proposal is unlikely to command consensus and we have accordingly not included the concept in our OSI package.

PARAS 103-109 (Collection, Handling and Analysis of Samples)

These paragraphs are based with minor amendments on paras 155, 156, 157, 158 and 161-163, pages 125-126 of CD/1364. In paragraph 106, we have deleted the bracketed second sentence which refers to inspections conducted by a State Party. We have also deleted paragraphs 159 and 160, pages 125-126 of CD/1364 which are in our view unnecessarily prescriptive and redundant in the light of paragraph 107. We have deleted the bracketed word "certified" in favour of "designated" in paragraphs 107 and 108 (paras 161 and 162, page 126 of CD/1364 respectively).

PARAS 110-114 (Observers)

With minor amendments, these paragraphs reproduce the largely agreed text of paras 164 and 168-171, page 127 of CD/1364. We have deleted bracketed paras 165-67 as there does not appear to be any need for a list of observers and there is no reference to one elsewhere. Paragraph 53 provides for the inspection request to include the name of the observer.

PARA 115 (Post-Inspection Briefing)

This paragraph reproduces the agreed text of para 174, page 128 of CD/1364. We have deleted the bracketed words "which the inspected State Party has allowed".

PARA 116 (Departure)

This paragraph reproduces the agreed text of para 175, page 128 of CD/1364 which the subsequent agreed addition of the second sentence which was agreed by Working Group 1 during the January intersessionals.

PARAS 117-119 (Reports)

Based on para 176, page 128 of CD/1364, paragraph 117 provides for the completion of a factual preliminary report by the inspectors not later than 72 hours after the completion of the inspection. Paragraph 118 (new language) provides for the completion of the final report of the inspectors not later than 14 days after the completion of the inspection. Paragraph 119 provides for the submission of reports through the Director-General. It should be noted that the provisions of paragraphs 61 to 66 of Article V concern the final report only. Paras 177 and 178, page 129 of CD/1364 are superfluous .

SECTION III: ASSOCIATED MEASURES

The language in this Section was proposed by the Australian delegation in "Chemical explosions: Some implications for CTBT verification drawing on Australian experience" (CD/NTB/WP.231) on 31 March 1995. While alternative text has been proposed, the great majority of delegations active on the subject have indicated a preference to work forward on the basis of the Australian textual formulations.

Our approach is based on our national experience of chemical explosions. On the basis of our research, we do not consider elaborate or costly measures covering chemical explosions are needed. On the other hand, a more modest package of steps might be helpful in enhancing the calibration of the IMS seismic verification network and in assisting the IDC in the accurate early analysis of chemical explosions, particularly for those explosions originating from the mining industry which are detected.

Our proposal - which requires that States Parties report to the Organization on chemical explosions on a "best endeavours" basis - has drawn explicit support from a number of delegations. In developing our draft, we have been mindful that any credible approach to associated measures for chemical explosions would need to:

. be proportionate to any actual verification problem. Any specific package of measures must be founded on demonstration of the actual level of CTBT compliance concerns presented by chemical explosions, in particular those in the mining industry. In Australia's experience, these concerns will be at most limited, taking into account the level of assurance already provided by the good-faith application of IAEA fullscope safeguards in the vast majority of non-nuclear weapon states.

. operate strictly in a reactive and secondary mode in support of the verification regime. Associated measures should be supportive measures - focussing on the resolution of uncertainties arising from IMS data, and on improvement of system calibration - and not constitute an additional free-standing leg of the verification package.

. be shaped carefully to take account of operational and economic implications. Negotiators need to have a clear understanding of what might or might not be practical against the operational needs and practices of industry

. be demonstrably cost-effective. Any associated measures strategy must be cost-effective compared with other elements of the CTBT verification regime.

We have identified three broad classes of large conventional explosive events as relevant to seismic verification of a CTBT:

(a) accidental explosions and explosions occurring as a consequence of acts of war: Explosions in this category are not at all common, and commonsense indicates circumstances would prevent any prior notification. In light of the levels of transparency which would almost automatically apply (eg through media interest), we would not see such explosions causing any serious verification problem. Furthermore, the utility of such detonations for calibrating a global seismic network would likely be negligible.

(b) large single-shot explosions occurring related to civil engineering works: Explosions in this category will, on Australian national experience, use orders of magnitudes less quantity of explosives per shot than mining industry explosions. On the other hand, they in general deliver considerably more seismic energy per ton of explosive than mining explosions. In Australia's national experience, such explosions at the magnitudes required in order to be registered as events on the GSETT-3 seismic verification network are extremely rare. Even so, their seismic equivalence to a small well-coupled underground nuclear explosion indicates they might have some potential to assist in calibration of the future CTBT global seismic network. Having in mind practical realities (including those relating to federal systems of government), we do not consider it realistic - nor would we consider it necessary - that a State Party should be required to provide such information to the CTBT Organization other than on a "best endeavours" basis.

In the absence of other information, such explosions could also give rise - at least on a theoretical level - to concerns about treaty compliance. This theoretical possibility would in our view be counter-balanced by other factors. For example, because such explosions are associated with major construction work, physical evidences are obvious to both local communities and remote sensor systems such as satellites.

(c) large mining explosions: Mining explosions are by far the most numerous chemical explosive events in Australia each year, and the heaviest users of explosives in terms of quantities. On the basis however of our research, there would appear to be a negligible risk that activities of the Australian mining industry could even theoretically give rise to CTBT compliance concerns, for two reasons. Firstly, the global detection system will not "see" most of the large mining explosions because they are distinct from well-coupled underground nuclear detonations as regards the amount of seismic energy produced. Our research indicates that many large-tonnage explosions from one important mining region are not recorded by a seismic station within local distances, let alone being recorded at regional or teleseismic distances by primary seismic stations. Secondly, those explosions which are "seen" will, we believe, be readily identifiable as ripple-fired mining explosions because of their seismic signatures.

In this context, there might be scope for some form of declaratory measure (perhaps backed up with opportunities for visits by the Organization), which would help the CTBT Organization's IDC to establish and maintain country-specific records on mining industry activities. We consider the design of any declaratory measures needs to recognise:

. the realities of industrial mining operations are such that prior notification would not be possible, nor can we see any verification benefit from such an idea, and

. the fact that no easy connection can be drawn between the TNT-equivalent tonnage of explosives used in a blast and the seismic energy produced by the blast (ie there is no "threshold" figure at which the raw quantity of explosives involved in a "ripple-fired" shot may be equated to events which would be ambiguous from a verification standpoint). From Australian research, it is apparent that the method of detonation is a much more important determinant of resultant seismic energy.

For these reasons, we do not believe that a systematic and mandatory collection of data at the national level on all large-scale "ripple-fired" mining explosions even after the event is useful or warranted. If a purely artificial threshold of 300 tonnes were set, this would still require Australia alone to collect data on some 400 detonations per year, only a small percentage of which are on present indications likely to be detected by the IMS. We are not convinced that such an exercise would have verification benefits sufficient to warrant the enactment of domestic legislation (requiring notification to the Government) or the costs involved. A more modest framework capable of reacting if and when an actual verification problem arises, and in the meantime providing annual general declarations on a "best endeavours" basis to assist IDC analysis, would be more appropriate.

PREVIOUS PARTS OF THE PROTOCOL

We have deleted existing Parts 5 (Satellite Monitoring), 6 (EMP Monitoring), 8 (Use of Satellite Data and Other Methods) and 9 (Procedures for International Monitoring) of the IMS section of the Protocol.

In the case of Parts 5 and 6, the proposal to include such technologies in the IMS is not able to command any more than minimal support. We judge consensus could not be achieved on inclusion of these two additional and costly elements to what is already an impressive and relatively elaborate IMS. On the other hand, we are of the view that if these technologies are deleted from consideration for inclusion in the IMS, we should strive to ensure that the verification benefits flowing from States Parties' national operation of such facilities should be available in accordance with the procedures we have suggested for the international exchange of other relevant information (paras 69 - 70 of Article V).

In the case of Part 9, no language has ever been suggested by any delegation. The heading itself was inserted as a place-holder at an early stage in the negotiation. In any case, the sort of material which might have been included here (see italicised explanatory para on page 100 of CD/1364) is already present in the relevant technology-specific parts of the IMS Protocol.

With the inclusion of substantive elements from Part 8 into the newly-proposed treaty language in paragraphs 69 and 70 of Article V (dealing with the international exchange of other relevant information), the entire part is redundant.